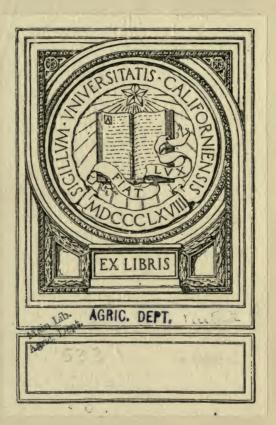
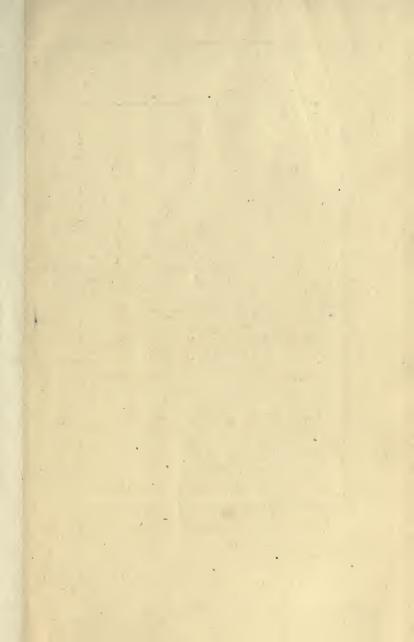
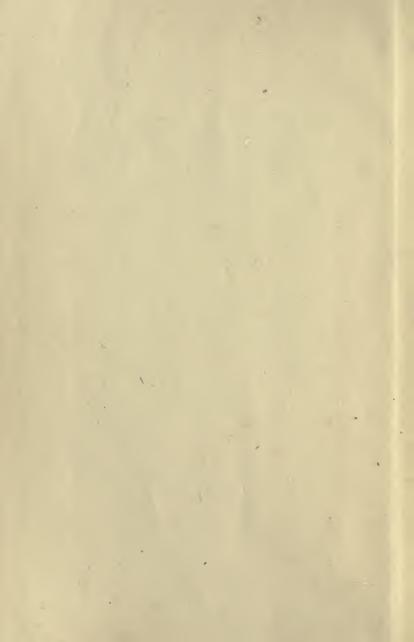
1001 Tests of Foods Beverages and Toilet Accessories

Arranged by Anne L.Pierce,M.S

Harvey W.Wiley M.D.











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1001 Tests of Foods, Beverages and Toilet Accessories





DR. WILEY AT WORK

Tried in the balance and found ---?

1001 Tests

of Foods, Beverages and Toilet Accessories, Good and Otherwise

Why They Are So

By

Harvey W. Wiley, M.D.

Director, Bureau of Foods, Sanitation and Health, Good Housekeeping Magazine

Arranged by

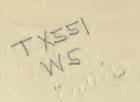
Anne Lewis Pierce, M.S.

Formerly Editor, Bureau of Chemistry, U. S. Dept. of Agriculture



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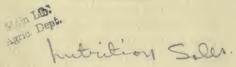
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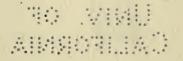


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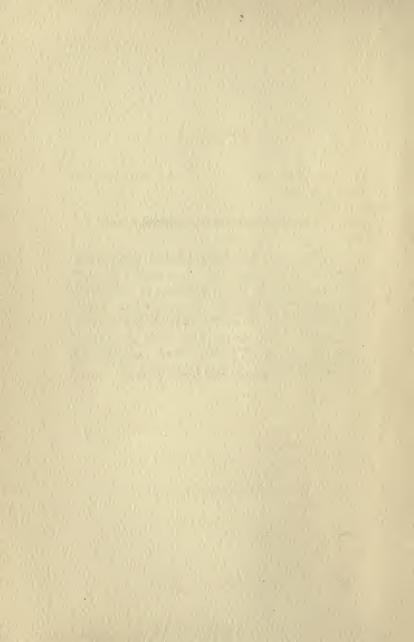
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ACKNOWLEDGMENTS.

The chemical and microscopical work lying back of this report was done under Doctor Wiley's direction, in the Institute of Industrial Research, 19th and B Streets, North West, Washington, D. C., of which Dr. A. S. Cushman is Director. The detail of the work was supervised by Mr. H. C. Fuller, whose assistance in reviewing the data is also acknowledged.



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THE PURE FOOD BATTLE

LOOKING BACKWARD AND FORWARD

POR a third of a century the fight for pure food has been waged and the end is not yet. No great question is ever settled until it is settled right. The game is not over until one or the other of the contestants is checkmated. Draws do not count. During this third of a century it has been my fortune to be in the thick of the fight, at first as a private, then through the various grades of leadership to colonel or even general of the brigade, and now again in the ranks. This battle has not, however, been a fight of a personal character as some late historians assert. It was and is a struggle for human rights as much as the Revolution or the Civil War. A battle for the privilege of going free of robbery and with a guaranty of health. It has been and is a fight for the individual right against the vested interest, of the man against the dollar. My first participation in the fray was a study of adulteration of table syrups for the Indiana Board of Health in 1880 and my last (but I hope not final) is this

book on tested foods, beverages, and cosmetics. During those thirty-four years I do not believe that any one caring to know has ever had to ask which side I am on. From the very first look into the awful conditions which so generally prevailed, up to the present time, with a survey of the intolerable evils that still exist, though happily to a less extent, I have stood always for food that is food.

The evils of adulteration are not many in kind but they ramify into hundreds of channels. At first there was no ethical standard of excellence among manufacturers of food. If one man put out a high grade product another could call a low grade or adulterated article by the same name. A representative of a great food distributing concern who appeared before the Committee on Interstate and Foreign Commerce to protest against the passage of the pending food bill, declared that the food industry of the country rested on fraud and deception. "Make us leave preservatives and coloring matters out of our food," he declared, "and call our products by the right name and you will bankrupt every food industry in the country." And he was sincere about it too. Dr. Victor C. Vaughan of the University of Michigan, now President of the American Medical Association, came

to Washington and testified to the harmlessness of benzoate of soda in food and he was by no means the only, although the most renowned, professor who, in the interest of like ingredients, journeyed to Washington for the same purpose. Makers of so-called patent medicines sent a powerful lobby to Washington to see to it that the food and drug bill should never become a law. It was commonly asserted that patent medicine interests influenced the public press to such an extent that the bill would never pass as long as it contained the sections relating to drug products. The powerful rectifiers of liquors in this country were a unit in opposing every step in the passage of a law that would interfere with making alleged old, mellow, intoxicating beverages bearing the name of the genuine product, out of alcohol and artificial flavors and colors. Grocers and druggists sent delegations to protest against the enactment of any measure that would prevent the sale of adulterated and debased articles or require full weight and measure. Every man who used alum, coal tar dyes, salicylic acid, burning sulphur fumes, benzoic acid, copper sulphate, saltpeter, saccharin, borax, or other nonfood ingredients in his products joined the solid phalanx that struggled to prevent the passage of

a law which would interfere with these despicable means of making money. Manufacturers and dealers who would gladly have continued to make pure and properly branded goods were forced by unfair competition to practice the arts of adulteration and misbranding.

As the public was led into the knowledge of these abuses and the pressure began to be felt looking to their correction, the enemies of pure food began to cry "muckraking," "exaggeration," "publicity bureaus," "yellow journalism," etc., seeking to raise a cloud of dust which would hide the real issue. A campaign of personal denunciation and disparagement was inaugurated of a magnitude that can only be appreciated by those whose activities and principles were directed toward the cleaning of the Augean stables of trade. By the accident of my official position, I had the good fortune to be the target of a veritable fusillade of poisoned arrows from every trade journal, newspaper and magazine which the adulterating interests could control. There was hardly a week that some interested organization or mercenary interest did not demand my removal from the public service. Detectives were placed on my track and every possible means employed to prejudice my scientific standing and official integrity.

Fortunately the more bitter and venomous the attacks the more rapidly the cause grew and The Federated Women's Clubs. waxed strong. the Patrons of Husbandry, the labor organizations and the medical profession all joined enthusiastically the army fighting for pure food. Finally the first part of the long battle came to a close. The pure food army gained a complete victory. On the 30th day of June, 1906, the President of the United States signed the Act which forbade interstate and foreign commerce in adulterated or misbranded foods and drugs. Although the first battle was won the war was not over. The defeated squadrons of the unethical and mercenary interests were driven from the field but they were not destroyed. What was their next move? To pervert the purposes of the Act and to control its execution. Under the provisions of the law the Bureau of Chemistry of which I was Chief, was charged with the analysis of all samples for the purpose of determining whether they were adulterated or misbranded. The Bureau of Chemistry was pledged to one very simple but most important principle, namely: "When in doubt protect the consumer." The interests pledged to adulteration and misbranding were not slow to learn that they had nothing to hope from a Government Bureau animated by such an unheard of rule. They immediately set about devising ways and means to put the Bureau of Chemistry out of business. They secured the appointment of another body, the Board of Food and Drug Inspection, charged, in direct contempt of the law, to decide the question of what was or was not an adulteration or misbranding. The decisions of this illegal board were by executive order made binding on the Bureau of Chemistry.

The appointment of this Board was hailed with shouts of approval by every interest and every individual who had opposed the enactment of the law. They were not mistaken. In the most direct and contemptuous manner this Board proceeded to do the kind of work which it was appointed to accomplish. But there were certain difficulties in the way. The Bureau of Chemistry anticipating the probability of the passage of a food law had carried on extensive experiments on young men for a period of several years and had demonstrated that certain bodies used to preserve and color foods were injurious to health. experiments had shown that boric acid and borax, salicylic acid and salicylates, sulphurous acid and sulphites, benzoic acid and benzoates and sulphate of copper were bodies seriously affecting health

and therefore forbidden under the law to be placed in food. These conclusions so inimical to the interests of those who added them to foods and so beneficial to the eaters of foods must be set aside. How was this to be done? There was no legal way to accomplish it. The courts could not be depended upon, in fact they were so unmindful of the vested interests that they were in most cases actually supporting the findings of the Bureau of Chemistry. Therefore, resort was again had to executive action. Without due regard to the provisions of the law questions relating to the effect of certain of these preservatives on health were referred to a Commission of Scientific Experts, established by executive order. Pending the action of this Commission the adulterators were permitted to poison the people of the country ad libitum and the Bureau of Chemistry was directed to bring no action against those who used these poisonous products.

What followed? A hallelujah chorus from all the cohorts of adulteration. It was a complete triumph for the hosts of Satan in so far as officialdom was concerned. But not so with an outraged Public Opinion. The press and the people and also many food manufacturers rallied in overwhelming numbers to the support of the Bureau

of Chemistry, hindered and halted. Rarely if ever has there been seen in any country such an overwhelming condemnation of official acts. Practically, however, the Janus doors of adulteration were wide open to such manufacturers as chose to use them. To the credit of the American business man it can be said that comparatively few availed themselves of this official indulgence to poison and defraud.

How deadly these concessions to adulteration have proved to the states that have attempted a better execution of the law than that instituted by the National Government, is vividly shown by an article in the Monthly Bulletin of the Indiana State Board of Health for December, 1913. The title of the article is "Benzoate of Soda and Sulphites," and the quotation is as follows:

"After hearing little from these old friends for more than a year, we are forced to admit that the lessons of the past have not been sufficiently thorough to protect our markets, for recent samples of cider have shown the presence of benzoate of soda, and several samples of grape juice have been found to be bleached and preserved with sulphurous acid. Occasional samples of socalled Maraschino cherries, tomato catsup and sweet pickles collected from towns supplied from Cincinnati and Chicago have also shown these preservatives.

"Two things are evident. We can never relax our vigilance in the protection of the food supply in the belief that we have reached a pure food millenium, and further, it is unwise to rely too firmly in the belief that manufacturers shipping goods into the State are careful to advise themselves as to our laws before they take their orders or make shipments."

In about a year the Remsen Board brought in its first verdict over-ruling the Bureau of Chemistry on the benzoate matter, and by official promulgation the food manufacturers of this country were promised complete immunity in the use of benzoic acid and benzoate in any food and in any quantity they might choose. There is a widespread impression that the quantity permitted is limited to one-tenth of one per cent. This is not so. A food manufacturer may put a shovelful of benzoate into any quantity of food he pleases and he is promised perfect immunity in so doing. No more outrageous and intolerable disregard of public rights and morals was ever perpetrated by the most vicious despotism described in the world's history. After a few years more the Remsen Board rendered another decision supporting the action of the Bureau of Chemistry in declaring saccharin an unfit ingredient of human food, but meanwhile during all these years the public was

exposed to its free and unlimited use. Again a short time ago the Remsen Board rendered a verdict supporting the contention originally made by the Bureau of Chemistry, that sulphate of copper is a poisonous body, and as such should not be added to food. Thus again the people of this country were exposed to the dangers of eating copper salts for five years, simply because adulterators demanded a review, hoping for a reversal of the decision of the Bureau.

The other questions referred to the Remsen Board, namely, the effect of sulphurous acids and sulphites and of alum on health, up to March of 1914, remain unanswered by the Remsen Board, or if answered the verdict is sealed in impenetrable gloom in the Department of Agriculture. Now for nearly seven years our people have been exposed to serious injury by the presence of these poisons in foods, under the high, though illegal, interpretation of a law enacted to protect the American people but turned by executive proclamation to the protection of adulterators!

This country has for so many years existed in an atmosphere of the sacred rights of the dollar that these concessions to Mammon have been looked upon as the chief function of law and its interpretation. This sentiment has been still more definitely crystallized by the decisions of the Supreme Court, which on the two occasions in which the purpose of the law to protect the consumer has been under advisement has ruled adversely to his interests. The first of these decisions was in the famous Johnson Cancer Case, in which the Court ruled that the law against false statements did not apply to the cure-all claims of the fake remedy; and the second case, viz., that of the United States vs. Bleached Flour, that poisons may be added to food unless the proof of possible injury to health is convincing.

During these long and unsavory years I tried to the best of my ability to discharge faithfully the difficult duties committed to me, in harmony with the obligations of my solemn oath of office and in the interest of the American people. In spite of official disfavor which made my environment particularly hard and in spite of the bitter denunciation of a few journals (a mere fraction of the entire press of the country) inspired by a questionable zeal, I held on, hoping that some change might come and that the spirit of service to the people might again enter into the heart of our high rulers. And what then? Colleagues preferred serious charges against me without the shadow of a foundation, my superior officers lent a ready ear, I

was tried in a Star Chamber without my knowledge and on ex parte evidence, convicted and sentenced to be dismissed from the position that I had held for nearly thirty years. This outrageous proceeding attracted the attention of Congress. A searching investigation of the charges against me was made and I was unanimously exonerated. Nevertheless, the men who had falsely and maliciously accused me and manufactured the evidence on which I was convicted were continued in office and in favor. As a protest against this condition of affairs I resigned as Chief of the Bureau of Chemistry on March 15, 1912.

Within two weeks of that time on April 1, 1912, I began my work for Good Housekeeping with a guarantee of academic freedom of expression and an advisory supervision of the advertisements of foods, remedies and cosmetics admitted to its columns. No one who has not experienced what I went through can conceive of the feeling of relief which I then enjoyed. Coming out of a field in which all the foremen had been my enemies I entered a garden of activity in which all the head men were my friends. In this favorable environment I have had unrestricted opportunity to carry on my battle for pure food, finding no enemy to stab me in the back. In connection with this work

I have had the good fortune with the laboratory facilities given me by Good Housekeeping to examine chemically more than a thousand samples of common foods, beverages, cosmetics and confections. I have also been permitted to criticise the labels and advertisements by means of which these products are offered to the consumer. In the great battle for the right a determined and methodical assault has been made upon false and misleading representation to the public. The fake remedy, the inert appliance, the exaggerated virtue, all are intended to mislead and deceive. Perfect candor and truth should characterize all claims made for all merchandise. The public gaze is already turned on these faults. The press is already taking notice. The Associated Advertising Clubs of the country have undertaken a systematic campaign against these extravagant and often harmful misrepresentations. Pure Advertising is fit handmaiden for Pure Food.

These are the objects I have had in view in the work done under the auspices of Good Housekeeping. The way in which these principles have been used as measuring rods to guide me in the decisions reached call for a word of explanation that the scope and results of the work may not be misinterpreted and the maximum amount of practical

good may be done. While these investigations were undertaken primarily to protect the advertising columns of Good Housekeeping, their deeper purpose was to render a constructive service to the cause of pure food and its honest labeling. merchandising, and advertising. This service could only be made broadly effective by placing on record the results of our findings on the thousand or more samples of foods, drug products and cosmetics that have passed through the laboratory during the past two years together with the reasons of those decisions. This is for the mutual advantage of the progressive manufacturer and the woman buyer who in many cases is groping blindly in a maze of doubts and fears as to what is and what is not an adulterated or misbranded package.

No one can realize more clearly the limitations and imperfections of such a piece of work than those who have struggled with the detail of it. It is urged that such partial lists, of necessity open to differences of opinion as to their grading, work injustices, are incomplete and therefore should not be printed. This does not seem to be an adequate reason for lacking the courage to take the next step and submit the work on its merits as far as it has been carried. No change, no reform, no

big piece of work has ever been carried through without minor and incidental hardships, and while the impossibility of perfection in such an undertaking is manifest, the doing of it seems none the less serviceable and worth while, from the broadest point of view.

Among the difficulties that beset the task are these: As the chemist and microscopist can not take the place of the factory inspector, some defects are not disclosed by analysis though pronounced bad conditions might be reflected in the product. The products of the same company vary from time to time, or from season to season—the output is not uniform, any more than is the output of the home kitchen, and therefore determinations on one or two samples may be misleading. This is especially true of goods handled by jobbers. bought here and there, and labeled with a common brand or distributor's name. Again an excellent product may be extravagantly labeled and misleadingly praised, while a mediocre one may be irreproachable in this regard, and the rating must be balanced to give the sanest and most practical help to the buyer. These and many other interacting causes make "whitelisting" a thankless undertaking. This book is not a white list nor a black list. There are doubtless many products

not mentioned which are as good as those we have examined; and no effort was made to find products to condemn. On the other hand, we sought in the open market those foods having a general sale and presumably of the best quality, that the advice might be positive rather than negative in its character.

It is something to be able to say definitely that the representative samples of the products listed, on which we shared the consumer's luck, are free from injurious or debasing ingredients, are at least of standard quality, and in many cases are superior to the requirements maintained by federal and state regulations, that the package offers honest weight or measure, and that the labeling is not misleading in any essential particular. And that is what we do say of the "starred" products reported. Occasionally a meaningless flight of fancy on the label or in the circular matter of a very fine quality product has been but lightly scored—the most practical service seeming to demand this. Some may think that too much stress has been laid upon exaggerated claims. But the importance of insisting on truthful descriptions of foods, drugs, and cosmetics, their uses and value, as well as their composition, can not be overestimated, whether the statements appear on

the label, in circulars, or in the advertisement. Otherwise the consumer is hopelessly at the mercy of the imagination of the label or advertisement writer, all relative sense of value is lost, and intelligent buying is impossible. To permit it in any marked degree, because the product is otherwise a good one, halts the whole reform movement, as it makes competition unfair, the honest man's sanely described product being overshadowed by the vocabulary of his business rival. Far reaching and radical changes have been made in the descriptive material of many well known products. since the folly of claiming that everything is the "best" the "most nutritious," the "only thing" of the kind worth buying, becomes rather striking when all of these superlatives are gathered together within a few pages of each other in our magazines and newspapers. A shrieking chorus of contradictory superlatives gets no one anywhere, either buyer or seller.

It will be noted that products ranging from 85 to 100 per cent. are starred. Manifestly there must exist among these minor differences of quality, the use of more or less expensive packages and wrapping, etc. A product rated at 85 is not so near perfection as one rated at 95. An olive oil, for example, may be pure, meet all the required

tests and standards, but be less characteristic in odor and flavor, less distinctive in character than another. The preference may be largely a matter of taste and it did not seem practicable to endeavor to distinguish any more closely between grades of excellence than this. The problem is further complicated by the question of relative cost. One product may be wholesome, nutritious or pleasing, and a good bargain at 50 cents, though not so delicious, nor of quite such high grade as something of the same kind sold at a dollar. Plainly this is a question in itself and one that could be given only secondary consideration in grading a large number of miscellaneous products. The housewife must adapt the findings to her own taste and pocketbook to some extent.

The same questions arise repeatedly in correspondence, concerning certain classes of foods, the special adulterations to be avoided, the points to be noted in reading the labels, the standards that a first class product should attain, and so on. The introduction to each classified list of products is intended to cover as briefly and simply as possible some of these salient points, to aid the judgment of the housekeeper in general buying and to assist in an intelligent interpretation of the ratings.

One of the many bright lights in the rather thick

cloud of difficulties that hung about this pioneer effort was the readiness of most of the leading manufacturers and advertising men to modify claims, labels, and advertisements when inconsistencies and inaccuracies were brought to their attention. The time is undoubtedly coming when it will be a confession of inferiority to overrate or distort the merits and special uses of any commodity—just as any boaster is self-branded a light-weight rather than a man of parts. To hasten the coming of this day, to uphold the hands of the manufacturers, who in a transition period, at some sacrifice and under unfair conditions of competition, are willing to make this advance and speak the plain truth about an honest product, depending on merit rather than on language to sell their goods; and to serve the housekeepers, who are the buyers of the nation's food and on whose judgment and wise selection the health of thousands of workers and children largely dependwe offer this report of progress, believing that in spite of its necessary limitations, it will be useful to buyer and seller alike. The object is neither to praise nor to condemn, but to serve. To furnish a stepping stone in the quagmire of doubts that the food agitation has created, to lay a foundation for further work, to provide the housewife

xxviii THE PURE FOOD BATTLE

with both specific and general information on mooted points, and above all to give a further impetus to the movement toward higher standards in the manufacture, merchandising, and advertising of foods, so essential to the well being of all—is the purpose of this book.

H. W. WILEY.

Washington, D. C., March, 1914.

KEY TO METHOD OF RATING PRODUCTS

Starred products (**) are those rated at 85 to 100, representing high quality and full weight and measure with accurate labeling and reasonably conservative claims.

(N) indicates a noncommittal rating between 76 and 84, given to products subject to such criticism, in my judgment, as incorrect labeling, slightly short weight, relatively inferior quality, etc.

Disapproved products (D), rated at 75 and less, are only in a few instances actually harmful (though some do contain chemical preservatives, alum, artificial colors, etc., deemed injurious to health), but are so classed because they are, in my opinion, of low quality, or are misbranded, or carry grossly exaggerated claims as to efficiency or nutritive value.

A two-year period (April 1912-1914) is covered by the examination of these samples. The character of some of the products may have changed since they were studied, labels and circulars may have been revised, and wherever such changes have been brought to our attention we have met the improvement with a reconsideration and re-rating of the product on its merits. Ratings will be advanced as further improvements are noted.

1001 Tests of Foods, Beverages and Toilet Accessories

NOTE: Changes and corrections in ratings and descriptive matter will be published, as opportunity may offer, in Good Housekeeping Magazine. All communications concerning such changes should be addressed to me as Director of the Good Housekeeping Bureau of Foods, Sanitation and Health, Woodward Building, Washington, D. C.

H. W. WILEY.

1001 TESTS

Classified Lists of Tested Foods, Beverages and Cosmetics with Comments.

I

BAKING POWDERS, YEASTS, ETC.

THERE are three kinds of baking powders, the cream of tartar type; the phosphate powders; and the alum powders. From the standpoint of economy, what the housekeeper wants is the powder with the highest carbon dioxide content and the minimum of starch or filler necessary to preserve its strength. High grade powders contain from 12 to 14 per cent. of carbon dioxide. Below 10 per cent. is poor quality. All leave a mineral residue in the bread and for this and other reasons I believe them to be relatively less healthful than the products made with yeast. For convenience, for quick use, etc., the baking powders are unequaled, and the hot bread, cakes, pancakes, so made fill a permissible rôle in the menu, if not "over-worked."

The alum powders are the least desirable, there being grave question as to their wholesomeness. Between the other two types there is not much to choose. Two teaspoonfuls of a tartrate powder leave in a loaf made from a quart of flour, about 165 grains of Rochelle salts, 45 grains more than a Seidlitz powder. The phosphate type leaves in the loaf a still larger amount of phosphate of lime and phosphate of soda, the latter being slightly purgative. The alum powders leave a deposit of hydrate of aluminum and sulphate of soda, or if phosphate is used, which is now generally the case, phosphate of aluminum is also present. There is some difference of opinion as to the degree of solubility of aluminum salts and their exact physiological effect. (See p. 4.)

Of late egg albumen has been added to baking powders, especially alum powders, and claims made as to the added nutriment so obtained and the greater efficiency of the powder. The albumen gives a fine thick foam when mixed with water, and the demonstrator points this out as evidence of its greater efficiency. These claims are misleading and the use of albumen in baking powders has been prohibited in some States on this ground. Formerly, many powders contained a slight trace of either lead (in cream of tartar powders) or

arsenic (in phosphate powders), but these bodies are now practically eliminated from well-made products.

TESTED BAKING POWDERS, YEASTS, ETC.

(Starred products (*) are rated at 85 to 100; (N) indicates a noncommittal rating between 76 and 84; disapproved products (D), rated at 75 and less; see Introduction and page xxviii for details as to method of rating.)

Calumet Baking Powder Company, Chicago, Ill.

(D) Calumet Baking Powder. (Contains alum and egg albumen declared on label. Doubtful if "complete neutralization" of alum is always effected as claimed.)

Cleveland Baking Powder Company, New York City.

★ Cleveland's Superior Baking Powder. (Cream of tartar type.)

Corby Brothers, Washington, D. C.

* Yeast.

Davis, R. B., Company, Hoboken, N. J.

(D) Davis O. K. Baking Powder. (An alum baking powder, correctly labeled.)

Fleischmann, Company, The, Washington, D. C.

★ Yeast. (Good yeast but starch present, presence of "tapioca flour" being declared in very small type.)

Gumbert, S., and Company, Brooklyn, N. Y.

(D) Up-Rise Baking Powder. (Alum baking powder

containing egg albumen, and correctly labeled.)

Jaques Manufacturing Company, Chicago, Ill.

(D) K. C. Baking Powder. (An alum baking powder, accurately labeled.)

Price Baking Powder Company, Chicago, Ill.

★ Dr. Price's Cream Baking Poyder. (Cream of tartar type.)

Royal Baking Powder Company, New York City.

★ Royal Baking Powder. (Cream of tartar type, excellent product but claim "absolutely pure," untenable as is always the case.)

Rumford Chemical Works, Providence, R. I.

* Rumford Baking Powder. (Phosphate type.)

Slade, D. and L., Company, Boston, Mass.

★ Congress Baking Powder. (Cream of Tartar type.)

★ Absolutely Pure Grape Cream of Tartar. (Equal to Pharmacopæial standard as claimed, but phrase "absolutely pure" objectionable.)

★ Baking Soda—Absolutely Pure Saleratus. (Same.)

(Note: Since writing this the Referee Board have rendered their decision that small amounts (2.31 grains per day) of aluminum added to foods are not injurious. Large amounts, however, produced "an occasional colic"! In my opinion the conditions were such as to render the results entirely inconclusive. The Board considered only the aluminum hydrate left in bread by the use of alum baking powders. This is well known to be the least injurious of the aluminum compounds. My opinion as to the undesirable effects of baking powders in general, when excessively used, is confirmed by the report of the Remsen Board.)

II

BEVERAGES

CHOCOLATES AND COCOAS

THESE are some of the questions repeatedly asked in regard to cocoas and chocolates—with their answers.

- 1. What is the difference between cocoa and chocolate—which is better to use? Cocoa is merely chocolate from which about half of the fat has been removed. It has therefore less heat value but is a better balanced food and is for that reason preferred for invalids and children, the chocolate being "too rich." The cocoas have from 20 to 27 per cent. of fat, and the chocolates, 45 to 50 per cent., 45 per cent. being required by the standard.
- 2. Is there a poisonous drug called theobromin in chocolate? There is a trace of caffein and about 1.8 per cent. of theobromin in cocoa. This is an alkaloid related to caffein but is generally conceded to be relatively free from any marked action on the nerve centers. Further than this cocoa and chocolate being made with milk and hav-

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ing more food value the stimulating effect of this ingredient is much decreased. We do not hear much of the "cocoa habit" or of folks who "can't get through the day without it."

- 3. Is an alkali-treated cocoa harmful? Why is it done? Only about 25 per cent. of cocoa is soluble in water, and the so-called "Dutch process" or treating with an alkali, is practiced because it combines with the fat and makes an emulsion, thus apparently increasing the solubility while really it does not do so at all. The process is not regarded with general favor, as it increases the mineral constituents, adding about 3 per cent. of alkalies to the cocoa, but one cannot say that it is actually injurious. The practice is questionable, and the consumer should be given the benefit of the doubt, therefore, the presence of these alkalies should always be plainly declared, that invalids and those of delicate digestion may avoid such brands. Extravagant claims in regard to the special merits of the treatment, resulting solubility, digestibility, etc., are misleading.
- 4. What is plain or bitter chocolate? This product should be composed of the roasted, crushed cocoa nibs only. These nibs contain over 50 per cent. of fat. The bitter chocolates of commerce contain from 45 to 49 per cent. of fat

only, showing the removal of a small part of the fat or the addition of some drying substance, such as sugar or starch.

5. What are the adulterants of cocoas? Starch and cocoa shells are sometimes added; iron oxide is occasionally added to cheap products to color them; added sugar is also considered an adulterant from the standpoint that it is a cheaper product mixed with the more expensive one for which you are paying. Sweetened chocolate should be so labeled. There is practically no adulteration of brands of any reputation.

TESTED BEVERAGES

(Starred products (★) are rated at 85 to 100; (N) indicates a noncommittal rating between 76 and 84; disapproved products (D), rated at 75 and less; see Introduction and page xxviii for details as to method of rating.)

TESTED CHOCOLATES AND COCOAS

Baker, Walter, and Company, Dorchester, Mass.

- ★ Breakfast Cocoa. (Claim "absolutely pure" untenable, as always.)
- Bensdorp, Amsterdam, Holland. (Bartlett, Stephen L., Company.)
 - (N) Royal Dutch Cocoa. (A good Dutch process cocoa but presence of added mineral ingredients makes statement, "Is acknowledged by the leading authorities to be an absolutely pure cocoa," especially objectionable.)

Blookers, Amsterdam, and New York.

★ Blooker's Daalders Cocoa. (Dutch process 3½ per cent. alkali added, properly labeled; good quality.)

Huyler's, New York.

- ★ Cocoa, Huyler's. (Mineral ingredients slightly high; not added alkali, however.)
- * Premium Chocolate.

Lowney, Walter M. Company, Boston, Mass.

★ Breakfast Cocoa. (Good quality. Extravagant claims. "Unlike any other"; "Of special benefit to those of delicate digestion.")

Maillard, Henry, 35th and Fifth Avenue, New York, N. Y.

- ★ Maillard's Breakfast Cocoa. (Extravagant claims as to solubility, "absolute purity." No cocoa is "thoroughly soluble.")
- * Maillard's Premium Chocolate.

Peter Cailler Köhler Swiss Chocolates Company, Fulton, N. Y.

★ Breakfast Cocoa. ("Absolutely pure" claim extravagant.)

Phillips, Charles H. Chemical Company, New York.

(N) Phillips Digestible Cocoa. (No right to the claim of special digestibility; phosphates added, about 20% of sugar and vanilla—declared on label.)

Stollwerck Brothers, Inc., New York.

* Gold Brand Premium Chocolate.

Van Houten and Sons, Holland.

(N) Van Houten's Famous Cocoa, Unexcelled.

(Greatly exaggerated claims as to improvement of the product by the Dutch treatment with alkali.)

Whitman, Stephen F., and Son, Philadelphia, Pa.

★ Instantaneous Chocolate. (A sweet chocolate, about half sugar, 24% fat. Should be so labeled.)

Yours Truly Company, Chicago, Illinois.

★ Yours Truly Breakfast Cocoa. (Not "absolutely pure," nothing is.)

(N) Yours Truly Premium Chocolate. (Samples examined were coated with shellac. No arsenic. Otherwise good quality.)

COFFEE AND TEA

All that the chemist can do to protect the buyer of coffee and tea is to assure him that the product is not faced or artificially colored, does not consist of dried stems instead of leaves in the case of tea, or is not coated with injurious substances and mixed with adulterants such as chicory in the case of coffee; to make sure that the amount of extract yielded is what it should be; that odor and flavor are good and that the tea and coffee are free from dirt. In the case of teas the samples were compared with a set of standard Treasury samples for grading purposes. These points have been determined for the samples reported but when it comes to fine gradations in quality, this is a matter for the expert and the individual as personal tastes vary widely and the practice of blending many different kinds of teas and coffees and selling them under fancy names, makes it impossible to establish any more definite standards. This is especially true in the case of teas. Wide variations in price exist among some of the starred samples and corresponding variations in quality naturally are found, but the teas approved are all standard and

good quality for the price asked. A frank statement on the label as to the kind of coffee entering into the blend of package goods bearing proprietary fancy names would clarify the whole situation and enable the buyer to judge both of price and relative quality and to know what coffees produce the preferred flavor. Why should we buy a "pig in a poke"? Why not know what blend of coffees we purchase? Such package goods, giving the buyer no inkling as to the nature and quality of the contents, do not always lead to fraud but it makes it perilously easy if a manufacturer is looking for such an opportunity. Let the house-keeper stand for intelligent, simple labels that mean something.

The coffee and tea drinker knows that he is taking caffein, a nerve stimulant, and more or less habit-forming drug when he takes these beverages, and the tannic acid present may affect the digestion more or less, varying with the individual susceptibility. There is no doubt but what the excessive use of tea and coffee injuriously affects a large percentage of the persons using them and in many cases of idiosyncrasy even small quantities are harmful.

The only other point of special interest is the "cereal coffees" or so-called coffee substitutes.

These are not substitutes for coffee in that they do not produce the same effect, do not have the same flavor, and cannot fill their place. They are harmless, their chief sin lying in the extraordinary claims made as to their nutritive value. As a matter of fact they contain in general about one-twentieth the nutrition of skimmed milk and their only virtue lies in providing a warm, harmless beverage and restricting the use of the caffein-bearing drinks. A true "decaffeinated" coffee would practically serve this purpose at the same time providing a better flavored product.

So-called instantaneous coffees, under whatever branding are made from an aqueous extract of coffee, evaporated to dryness, at a low temperature, usually by aid of a vacuum, preserving as far as possible the aromatic constituents of the extract. There is no method of drying, however, which can preserve all of the volatile flavors and qualities of coffee. The instantaneous coffees must, therefore, of necessity lack some of the deliciousness of the freshly made beverage. The claims which are made for them in regard to increased wholesomeness, lower content of caffein or tannic acid, are not borne out by the analytical data. These coffees are most convenient for campers and on all occasions when the quick

preparation of the beverage is desirable. This appears to me to be their sole useful rôle.

TESTED COFFEES, AND COFFEE SUBSTITUTES

(Starred products (*) are rated at 85 to 100; (N) indicates a noncommittal rating between 76 and 84; disapproved products (D), rated at 75 and less; see Introduction and page xxviii for details as to method of rating.)

Arbuckle Brothers, New York.

- (N) Ariosa Coffee. (Good quality for price; statements on label mildly extravagant; coated with sugar and egg.)
 - ★ Yuban, The Arbuckle Guest Coffee. (A good blend.)

Aroma Coffee Company, Duluth, Minnesota.

- (N) Caldwell's Electric Cut, not ground coffee. (Claims on label extravagant as to removal of tannin, quality, etc.)
- Baker Importing Company, 109 Hudson Street, New York, N. Y.
 - ★ Bakerized Steel Cut Coffee. (Claims for special process slightly exaggerated; evenly ground and clean, but no marked effect on composition determined.)
- Bismark Grocery Company, Bismark, North Dakota.

 ★ Yours Truly Coffee.
- Blanke, C. F., Tea and Coffee Company, St. Louis, Missouri.

- ★ Coffee. (Extravagant quality claims—"Universally known as the best coffee on the market.")
- * Fairy Cup Instant Coffee.

Blendo Food Company, Philadelphia, Pa.

(D) Blendo. (Absurd claims as to nutritive value and "superior to coffee" flavor; a mixture of roasted peas, rye and barley.)

Borden's Condensed Milk Company, New York, N. Y.

(N) Borden's Condensed Coffee. (A very small amount of coffee with sugar and condensed milk sold for 31 cents for 15½ ounces. Slightly short weight on samples tested.)

Chase and Sanborn, Boston, Mass.

* Seal Brand Coffee.

Clark, Coggins and Johnson Company, Boston, Mass.

(N) Puri-tan-ated Brand Coffee. ("Nourishing" claims extravagant, claims for effect of special process in removing tannin, etc., unwarranted.)

Climax Coffee Company, Chicago, Illinois.

★ Mrs. Rorer's Brand Own Blend Coffee. (Extreme claims as to keeping qualities.)

Crosse and Blackwell, London and New York.

(N) Pure Essence of Coffee. (Extractives rather low, hardly a true "essence.")

Dwinell-Wright Company, Boston, Mass.—Chicago, Ill.

★ White House Brand Coffee.

Fischer, B., and Company, New York.

* Hotel Astor Coffee.

- Githens, Rexsamer and Company, Philadelphia, Pa.

 ★ The "400" Blend Roasted Coffee.
- G. Washington Coffee Sales Company, New York, N. Y.
 - (N) G. Washington Prepared Coffee. (A good instantaneous coffee; claims as to harmlessness, etc., much exaggerated as most of the caffein remains. "Drink all the coffee you want" dangerous and misleading advice.)
- Harris, W. B., Company, New York City.★ Royal Stag Coffee.
- Kellogg Food Company, Battle Creek, Mich.
 - (N) Kellogg's Cereal Beverage, Minute Brew. (Roasted, pulverized grain, no more "health-ful" than other cereal coffees.)
- Kneipp Malt Food Company, Mantowoe, Wisconsin.
 - (N) Kneipp Malt, (A Coffee Substitute). (Claimed to be a roasted malt; so burned that malting can not be confirmed. Flavored with an extract from the leaves and pericarp of the coffee plant.)
- Levering Coffee Company, The, Baltimore, Md.
 - * Tourist Coffee.
- Lockyer and Company, Chicago, Ill.
 - ★ Extra Fancy B. Coffee.
 - * Extra Fancy C. Coffee.
- Merck and Company, New York, (Distributors).
 - ★ Dekofa. (A true decaffeinated coffee, containing

only 0.15 per cent. of caffein, which is as near complete removal as can be attained.)

Panama Banana Fruit Company, New York.

(N) Banan-Nutro. (A product made from ground roasted bananas. Exaggerated claims as to nutritive value. Not a "king of substitutes for coffee" in so far as flavor is concerned.)

Porto Rico Trading Company, Inc., 127 Franklin Street, New York, N. Y.

* Queen Isabella Porto Rico Coffee.

Postum Cereal Company.

- (N) Instant Postum. (Roasted cereals with an excess of mineral ingredients, source unknown: harmless, but claims much exaggerated.)
- (N) Postum Cereal. (Same.)

Potter and Wrightington, Boston, Mass.

(D) Old Grist Mill. A substitute for coffee. (Contains wheat, peas, and dandelion, and some coffee, objectionable in a "coffee substitute," claims as to aiding digestion, preserving complexion, etc., misleading.)

Quinby, W. S., Company, Boston, Mass.

★ La Touraine, The perfect coffee. ("Perfection" exaggerated!)

Sprague, Warner and Company, Chicago, Ill.

(N) Richlieu Brand Hans Evers Process Vacuum Treated Coffee. (Claims as to removal of harmful products by vacuum process not substantiated; caffein still present.)

TESTED TEAS

Asiatic Products Company, San Francisco, California.

- ★ Dalmoy Blend Tea.
- * London Blend Brand Tea.
- * Sa-Sa-Ma Brand Tea.

Berndt and Company, Baltimore, Md.

(D) Juno Maté Paraguayan Tea (Ilex Paraguayensis).

(Contains as much caffein as coffee and still most extravagant claims are made as to healthfulness, food value, freedom from bad after effects, etc. Product unobjectionable but no ground found for such claims.)

Blanke, C. F., Tea and Coffee Company, St. Louis, Missouri.

* Magic Cup Soluble Tea.

Dwinell-Wright Company, Boston, Mass.—Chicago, Ill.

★ White House Brand Orange Pekoe Tea.

Fischer, B., and Company.

* Hotel Astor Tea.

Gillet, Martin and Company, Baltimore, Md.

- (N) House of Lords, Ceylon Tea. (A heavy, liquoring tea; not well cleaned.)
 - * Standard HE-NO Tea. (A good grade of green tea.)

Harris, W. B., and Company, New York, N. Y.

★ Royal Stag Tea. (Good for price; 36 cents a pound, not highest quality.)

Lipton, London and New York.

- ★ Lipton's Tea—Extra Choice Blend of Ceylon and India Tea—Black.
- ★ Lipton's Extra Choicest Blend of Ceylon and India Tea—Black, blend A.
- ★ Lipton's Ceylon and India Tea—Black, blend B.

Quinby, W. S., Company, Boston, and Chicago, Ill.

★ Golden Dome Orange Pekoe Ceylon Tea. (A sixty cent tea, good flavor but not exceptional; sold in bulk to retailers and branded bags furnished for sales to consumer.)

Salada Tea Company, New York, N. Y.

* Salada Tea.

* Salada Ceylon and India Tea.

Tetley, Joseph, and Company, London, Eng.

★ Tetley's Tea, Black, India and Ceylon.

Victoria Tea Company, Chicago, Ill.

- ★ "My Own" blend Tea—Blend No. 1.
- ★ "My Own" blend Tea-Blend No. 2.

Yours Truly Company, Chicago, Ill.

★ Yours Truly Tea. (A 40 cent tea—good quality for the price.)

SOFT DRINKS, TONICS, AND MEDICATED BEVERAGES

While the miscellaneous bottled soft drinks on the market with the exception of those bearing habit-forming drugs, such as Coca Cola (caffein), cannot be said to be absolutely injurious, they represent to my mind second grade products of a miscellaneous composition which does not recommend them for consumption by the young or for a place in a list of high grade products. Many of the most highly prized remedies are of vegetable origin and almost every root, herb, or extract, found in these so-called soft drinks is described as a drug in the pharmacopæia, the official standard of If these bodies have the remedial values assigned to them they should not be given promiscuously to healthy people. Why give your child an extract of barks and roots colored with caramel, many of them having medicinal properties, or a ginger ale, owing its pungency chiefly to capsicum, or a sarsaparilla, which has never seen sarsaparilla, but is made from wintergreen, and sassafras, and colored with caramel, when you can always obtain good grape juice, true ginger ales, and pure fruit juices obtained direct from the lime, the berry, the orange or lemon?

The question of the presence of alcohol in grape juices has recently been raised. There is never more than a trace of alcohol present, and this only takes place when the grapes have been held over after crushing during the warm season. Under such conditions a slight fermentation might take place producing minute amounts of alcohol. This point seems negligible and certainly could not be used to furnish a foundation for the addition of sugar to grape juices, since this practice makes it possible to use inferior and half-ripened grapes and supply artificial sweetness by adding sugar, giving a product which does not compare with that prepared from properly ripened grapes alone.

None of the soft drinks given in the disapproved class is especially injurious except as intimated above, nor do they contain preservatives, saccharin, or dangerous coloring materials as is sometimes the case. It is merely that they fail in quality and are for that reason disapproved as not belonging in a list of high grade products, or are of secret composition and as such unworthy of patronage. Some of the manufacturers have undoubtedly made efforts to improve their product and moderate their claims especially of late years.

Upon the whole the "habit of drinking," even of a preparation of roots and herbs, is not one to be generally commended. At least every parent having at heart the welfare of his child is entitled to know what that child drinks when he patronizes the soda fountain or the bottled beverages.

TESTED SOFT DRINKS, TONICS AND MEDI-CATED BEVERAGES

Anheuser-Busch Brewing Association, St. Louis, Mo.

★ Malt Nutrine. (General claims as to tonic and flesh forming results permissible. Statement that it is non-intoxicating is modified by the declaration of the presence of 1.9 per cent. of alcohol. Is non-intoxicating when taken in medicinal doses, as recommended on label.)

Armour Company, Chicago, Illinois.

* Grape Juice.

American Fruit Products Company, Rochester, N. Y.

★ Duffy's Apple Juice.

Brooke, C. M., and Sons, New York and Melbourne.

(D) Lemos, Brooke's. (Apparently a mixture of lime and lemon pulp and juice, sweetened, colored with Napthol Yellow S (a permitted coal tar dye) and preserved with 0.10 per cent. of benzoate of soda, declared on the label. "Use Lemos instead of lemons for all purposes."

It is not a wholesome equivalent for pure lemon juice by any means.)

Cliquot Club Company, Millis, Mass.

(N) Celebrated Cliquot Club Extra Dry Ginger Ale.

(Found little or no ginger resins and but little ginger oil. Owes pungency mainly to capsicum, which is declared on label as follows: "This bottle contains a minute amount of capsicum to give increased pungency.")

Coca Cola Company, Atlanta, Georgia.

(D) Coca Cola, Bottled. (A beverage sold as a soft drink containing a habit forming alkaloid, caffein, not declared in any way and which may prove injurious to health; contains also a little phosphoric acid, about 9 per cent. of sugar, and is colored with caramel.)

Coleman and Company, Ltd., Norwich, Eng.

(D) Wincarnis. (A sweet red wine containing malt extract and extract of beef. The latter has practically no food value; contains 18 per cent. of alcohol, and the claims that it is "a nerve food without an equal" and "a powerful restorative and vitalizer" and "a liquid food" are not permissible, as it is merely a mild stimulant and tonic, has practically no nutritive value and is not a "nerve food" at all.)

- Evans' Sons, Lescher and Webb, Ltd., London and Liverpool.
 - * The Montserrat Lime-Fruit Juice.
- Golden Gate Fruit Company, San Gabriel and New York, N. Y.
 - (D) Orange Ade. (Citric acid substituted in whole or in part for orange juice, artificially colored with a coal tar dye and preserved with sodium benzoate. Notice of judgment 2864.)
- Hawaiian Pineapple Products Company, Honolulu.
 - ★ Dole's Pure Hawaiian Pineapple Juice.
- Hires, Charles E., Company, Philadelphia, Pa.
 - (N) Hire's Household Extract. (Is true to label being made from a mixture of many different barks and roots, such as juniper, pipsisewa, spikenard, etc. Not deemed of a composition suitable for children's use. May have medicinal effect.)
- Hoff, Johann, agent, Eisner Mendelson Company, New York, N. Y.
 - (D) Johann Hoff's Extract. (A malt extract containing nearly 5 per cent. of alcohol, more than many beers, with 92 per cent. of volatile matter, mostly water, and only 8 per cent. of nutritive solids. Claims that it is "recognized by the medical faculty as an ideal food," and that it is an "active remedy for coughs, colds, sore throat, bronchitis, etc.," are not warranted in any way.)

Hygeia Distilled Water Company, New York, N. Y.

- * Hywaco Ginger Ale.
- * Lemon Soda.
- (D) Hywaco Sarsaparilla. (Sweetened water, flavored with sassafras and wintergreen. Not true to label as it contains no sarsaparilla. An accepted commercial misbranding. All sarsaparillas are of this type.)

Moxie Company, Boston and New York.

- (D) Moxie. (Contains a little oil of sassafras and wintergreen, caramel, sugar and a trace of extractives from peruvian bark. Former extravagant tonic claims have been modified but are still far too strong. Harmless but of secret composition.)
- O. T. Limited, London, Blackfriars, S. E., Sydney and Melbourne, Australia.
 - (D) O. T. A delicious Drink,—A Tonic. A Digestive. (Extravagant tonic and digestive claims for a product containing capsicum, caramel and flavoring oils.)

Pepper, Dr., Company, Waco, Texas.

(D) Dr. Pepper (King of Beverages). (Makes special merit of being free from caffein, and cocain. Contains benzaldehyde and caramel coloring, with raspberry flavor and a trace of citric and phosphoric acid.)

- Pierce, S. S., Company, Boston, Mass.
 - * Tally-Ho Ginger Ale.
 - (D) Tally-Ho Sarsaparilla. (See Hygeia Distilled Water Company, N. Y., Hywaco Sarsaparilla for comments.)
- Puritan Fruit Products Company, Fredonia, N. Y.
 - (N) Red Wing Grape Juice. (Two per cent. or less of sugar added declared on label; should be called a "sweetened grape juice"; addition of dubious necessity or desirability.)
- Rose, L., and Company, Ltd., London.
 - * Rose's Pure West Indian Lime Juice unsweetened.
- Ross, W. A., and Sons, Ltd., Belfast, Ireland.
 - * Ross's Royal Ginger Ale.
- Schuyler, A. C., 333 West 36th Street, New York.
 - ★ Delatour Ginger Ale.
- Sheboygan Mineral Water Company, Sheboygan, Wis.
 - * Aromatic Ginger Ale. (Not "chief of them all.")
- Standard Bottling and Extract Company, Boston, Mass.

 * Standard Ginger Ale.
- Welch Grape Juice Company, Westfield, N. Y.
 - * Grape Juice.
- Wyeth, John, and Brother, Philadelphia, Pa.
 - (N) Liquid Malt Extract. (Alcohol slightly too high (2.53 per cent.), as much as a light beer. Con-

tains, however, 14 per cent. of solids and the claims are only slightly exaggerated. Its special adaptability for nursing mothers and consumptives is over stated.)

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BISCUITS, CAKES, ETC.

THERE is but little criticism to be made concerning the package "crackers," cakes, biscuits, etc. Usually no great nutritive claims are made. In some cases extravagant claims are made for bran, and whole wheat products. These are of value in preventing constipation, and are of maximum nutritive value, when true to name. Too often, however, the products are bolted and the analysis does not justify the claim that the whole wheat, including the bran, was used. This is the case with the Educator products, which not only show by their nitrogen and ash content that they are not made of true whole wheat, but rather extravagant claims are made for their efficiency. The simple patent flour biscuit of the Loose-Wiles Company is a perfectly good biscuit, but when they claim that it "contains all the nutriment of the grain" and "is different from all other soda crackers," etc., the labeling is plainly misleading.

One other product is open to special criticism, namely, the rusks and biscuits of the Jireh Dia-

betic Food Company, which claim to "cure constipation," "provide an anti-acid diet," and to be "especially suitable for diabetics," when they contain about 47 per cent. of starch, or more, the "special treatment" being of dubious value. Such claims in combination with the misleading word "diatetic" garbled from the two words "dietetic" and "diabetic" cannot be considered frank, honest, and instructive labeling, and would of necessity mislead the average layman.

The main objection to this class of products, if such it be, is that the consumer pays a high price for the sanitary package. Any one who remembers the pound of soda biscuits bought in bulk knows that he is getting much less, due allowance being made for breakage, when he buys the dozen or so prettily packed cakes or crackers in a neat box. The public seems to demand such goods, however, and except on the score of economy, a factor in the problem which we are considering in this instance only in extreme cases, the output is commendable.

TESTED BISCUITS, CAKES, ETC.

(Starred products (★) are rated at 85 to 100; (N) indicates a noncommittal rating between 76 and 84; disapproved products (D), rated at 75 and less; see Introduction and page xxviii for details as to method of rating.)

Edwards, Elinor E., East Orange, N. J.

(N) Edwards' Bran Cookies. (Analysis indicates a bran flour rather than pure bran. Claims for efficiency as a nutritive laxative largely justifiable.)

Holland Rusk Company, Holland, Michigan.

(N) Holland Rusk, (Label misleading as to origin.

Not the original "Holland Rusk"; made in

Holland, Mich. Not the "most practical and
economical food known.")

Ivins', J. S., Sons, Philadelphia, Pa.

★ Ivins' Bonnie Wafers.

* Ivins' Lunch-on-Thin.

Jireh Diabetic Food Company, New York, N. Y.

- (D) Jirch Diatetic Rusks. (A good rusk, high in nitrogen and mineral ingredients, but not "a cure for constipation" and not especially adapted for diabetics as claimed.)
- (D) Jireh Diatetic Biscuits. (Most extravagant, indefensible, medicinal claims; contains about 65 per cent. of starch and statement is made that it is "a food remedy for diabetes, indigestion, insomnia, rheumatism, bright's disease, and all forms of nervous and gastric derangement.")

Johnson Educator Food Co., Boston, Mass.

(N) Educator Gluten Cookies. (Contain somewhat less protein than should be found in a standard gluten flour. Following claims not entirely

warranted: "Unequaled for those who are restricted to a gluten diet" . . . "It contains a minimum of starch and a high proteid content."

- * Educator Graham Crackers. Unsweetened.
- (N) Educator Oatmeal Crackers. (Nitrogen and mineral ingredients both lower than in average hulled oats. Claim "Combines wheat phosphates and oat nitrates," meaningless.)
- (N) Educator Toasterettes. (Weight understated; formerly 11 to 14 ounces was claimed; now only 9 ounces are claimed. Hardly a satisfactory way from the consumer's point of view of correcting short weight. Nitrogen and mineral ingredients both too low for a true "entire wheat" cracker.)
- (N) Educator Wafers. (Weight claim lowered to 8 ounces so that they now run over weight, though were formerly short. Analysis does not indicate a true whole wheat product. Nitrogen content is fairly good but the mineral ingredients are low, indicating that bran has been removed. These products are good but claims are unwarranted and the price per pound is high.)

Loose-Wiles Biscuit Company, 666 Causeway Street, Boston, Mass.

- * Pakatin-Biscuit.
- * Sunshine Assorted Biscuits.

- * Sunshine Citrus Biscuits.
- ★ Sunshine Clover Leaves—A Sugar wafer confection.
- * Sunshine Dessert Wafers.
- ★ Sunshine Graham Crackers. (Contain about 20 per cent. of sugar, not declared; should be called "Sweetened Graham Crackers.")
- * Sunshine Philopena Sugar Almond.
- * Sunshine Petite Beurre Biscuits.
- ★ Sunshine Tafi San Sugar Wafers.
- * Sunshine Veroniques.
- (N) Takoma Biscuit. (A patent flour biscuit of usual composition, contains no more mineral ingredients than the regulation patent flour and still makes the following extravagant claims: "containing all the nutriment in the grain; entirely different from all other soda crackers; easily digested; very nourishing.")
 - ★ Vienna Sugar Fingers. (Why Vienna?)

National Biscuit Company, New York, N. Y.

- * Adora.
- * Arrowroot Biscuit.
- * Baronet Biscuit.
- * Cheese Sandwich.
- * Chocolate Tokens.
- * Chocolate Wafers.
- * Epic Wafers.
- * Festino Almonds.
- * Fig Newtons.

- ★ Frotana—The Fruit Biscuit.
- ★ Graham Crackers. (Contain about 17 per cent. of sugar, not declared; should be called "Sweetened Graham Crackers.")
- * Lemon Snaps.
- * Nábisco.
- ★ Old Time Sugar Cookies.
- * Royal Lunch.
- * Saltine Biscuit.
- ★ Social Tea Biscuit.
- * Sponge Lady Fingers.
- * Uneeda Biscuit.
- * Vanilla Wafers.
- * Water Thin Biscuit.
- ★ Zu-Zu Ginger Snaps.

Remmers, B., and Sons, Philadelphia, Pa.

★ Gluten Bread, Diabetiker loaves. (Leavened with hydrogen peroxide but none found in the finished loaf; carbohydrates reduced to from 10 to 15 per cent.)

IV

CANDIES

THE principal adulterants to be feared in confections have been sulphites, used especially in bleaching molasses, saccharin used to replace sugar, metallic substances and shellac containing arsenic, used in coating and giving a gloss, especially to the cheap, penny candies sold to children, artificial, poisonous colors, and the substitution of the cheap glucose made from starch, for the true sugar (sucrose) of which candies are supposed to be made. Glucose may be used almost entirely to supplant sugar, in the case of low grade candies, in which case it is a cheapener (whatever may be thought of its wholesomeness and relative digestibility, especially for children), as the price is much less than that of sugar. Moreover, the child will eat more of confections made of glucose, as they are less sweet and this again I consider undesirable. The glucose may be used honestly in small amounts to give certain physical characteristics, especially in such candies as nougatines, caramels, etc. If used in quantities not exceeding 10 to 15 per cent. its presence has

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been disregarded, it being considered that it was employed in such cases without fraudulent intent. In my opinion, however, glucose when present in a candy should be declared on the label and I hope to see the day when it will be replaced by invert sugar, both in the interests of dietetics and honesty. Sugar is more apt to crystallize and to melt than is glucose, which is more than one-half dextrin (a non-sugar) and it is for this physical effect that the candy-makers desire to use it. If manufacturers would plainly label all mixed products with the percentage of glucose present the popular prejudice against glucose based on its extensive and continued use under no name, or one that gives no index to its nature, or a misleading name, would soon disappear.

Personally, I believe that candies should be given very sparingly to children, because of the tendency to decrease and debase the natural appetite, creating a longing for only sweet foods, which increase the danger of digestive disturbances. For hard working men and women, candies when properly used, offer a valuable addition to the diet. Cake, milk chocolates, plain taffy and mints, the hard candies like stick candy, if made from pure sugar, and fruit flavors, and free from artificial coloring, are probably as healthy and

nutritious as any sweets that can be used, especially for the little folks. We are writing for the present as well as for the future. We realize that candies will continue to be used in large quantities for children in spite of the sound dietetic objections to this practice. Our present purpose, therefore, is to emphasize the importance of the use of pure constituents, pure sugar and honey, invert sugar, natural coloring matters of vegetable origin, caramel (burnt sugar), natural flavors derived chiefly from fruits, clean milk, and pure chocolate all manufactured in the most sanitary manner. Too long keeping should also be avoided. dust proof containers employed and the products handled in the most cleanly and hygienic manner possible.

TESTED CANDIES

(Starred products (★) are rated at 85 to 100; (N) indicates a noncommittal rating between 76 and 84; disapproved products (D), rated at 75 and less; see Introduction and page xxviii for details as to method of rating.)

Aromint Company, Cincinnati, Ohio.

* Aromints.

Belle Mead Sweets, Trenton, N. J.

- ★ Belle Mead Sweets Chocolate Coated Caramels.
- ★ Old Fashioned Chocolate Coated Vanilla Whipped Creams.

Bishop and Company, Los Angeles, California.

(N) Calarab Candy Figs. (50 per cent. sugar and nearly 17 per cent. glucose.)

Borden's Condensed Milk Company, New York, N. Y.

* Milk Chocolate.

Foss, H. D., and Company, Boston, Mass.

(N) Caramels. (33 per cent. of glucose.)

★ Chocolate Peppermints.

* Pony Sticks.

(N) Quality Liquid Cream Cherries. (Cherries colored with erythrosine, a permitted coal tar dye.)

Heide, Henry, New York, N. Y.

(N) Fine Marshmallows. (20 per cent. glucose.)

Heller-Barnham Company, Hopewell, N. J.

(N) Hopewell Dainties. (20 per cent. glucose in cream fillings; 12 oz. sold for 1 lb. (80 cents); good quality otherwise.)

Hershey Chocolate Company, Hershey, Pa.

★ Hershey's Sweet Milk Chocolate.

Huyler's, New York City.

* Bonbons.

(N) Caramels. (24 per cent. glucose.)

* Chocolates.

* Nugatines.

* Vanilla Sweet Chocolate.

Johnston, Milwaukee, Wis.

- (N) Superfine Caramels. (51 per cent. glucose.)
- (N) Swiss Style Milk Chocolate Creams. (20 per cent. glucose.)

Loose-Wiles Company, Boston, Mass.

(N) Nobility Chocolates. (25 per cent. of glucose in cream filling, price \$1.00 a pound.)

Lowney, Walter M., Company, Boston, Mass.

- * Chocolate Gems.
- ★ Chocolate Ice Cream Drops. (Why ice cream?

 The cream filling contained 12.5 per cent. of glucose.)
- (N) Crest Caramels, Chocolate Covered. (19 per cent. of glucose; good quality but glucose content slightly high.)
- (N) Crest Nugatines—Chocolate Covered. (18 per cent. glucose.)

Maillard's, New York.

- * Bon Bons.
- (N) Caramels. (Glucose 23 per cent.)
 - * Chocolate Creams.
 - * Nugatines.

Manufacturing Company of America, Philadelphia, Pa.

★ U-All-No After Dinner Mint.

Mayer, Alfred, Philadelphia, Pa.

* Marmay Crimped Chocolates, Nuts and Fruits.

National Candy Company.

- ★ Skylark Chocolates, Seventeen Varieties. (11 per cent. of glucose.)
- (N) Skylark Milk Chocolate Creams. (16 per cent. of glucose.)

New England Confectionery Company, Boston, Mass.

(N) Pony Sticks Assorted. Necco Sweets. (30 per cent. of glucose; permitted coal tar dyes.)

Nunnally, Atlanta, Ga.

- ★ Caracas Chocolate Creams. (10 per cent. glucose; a 40 cent candy, good quality for price.)
- (N) Chocolate Covered Cordial Cherries. (Cherries colored with ponceau, a permitted coal tar dye.)

Park and Tilford, New York, N. Y.

- * Bon Bons.
- (N) Caramels. (22 per cent. of glucose.)
- * Chocolates.
- * Nugatines.

Peter Cailler Kohler Swiss Chocolates Company, Fulton, N. Y.

- ★ Almond Milk Chocolate. (Disparages competitor's products in an unwarranted way.)
- * Original Sweet Milk Chocolate.
- * Nestle's Hazel Nut Sweet Milk Chocolate.
- * Nestle's Almond Sweet Milk Chocolate.

Powell's, New York, N. Y.

★ Kewpie Kandies. (Pure sugar candies, only vegetable colors used.)

Rueckheim Brothers and Eckstein, Chicago, Illinois.

- (N) Angelus Marshmallows. (Contain 36 per cent. glucose but more of this ingredient is said to be required for marshmallows than for most other types of candies.)
- (N) Chocolate Marshmallows, Angelus. (19 per cent. of glucose and 54 per cent. of sucrose. Hardly "A message of purity," though they are very good marshmallows.)
- (N) Nut Cracker Jack, The Famous Confection. (17 per cent. of glucose.)

Schrafft's, New York.

- * Bonbons.
- (N) Caramels. (Glucose 28 per cent.)
 - * Chocolate Creams.

Suchard, Neuchâtel, Switzerland, London, Eng.

★ Chocolate (Chocolat sans sucre). (An unmixed chocolate of high grade containing 53 per cent. of cocoa fat.)

United Berne Zurich Chocolat Manufacturing Companies, Switzerland.

★ Chocolat Lindt. (A typical sweet chocolate, should be so labeled; contains 31 per cent. of fat and 47 per cent. of sugar.)

Wadsworth Chocolate Co., Newark, N. J.

* Wadsworth's Sweets, Mints.

- Whitman, Stephen F., and Son, Inc., 411-421 Race Street, Philadelphia, Pa.
 - * Chocolate Elite Cream. (Glucose 12 per cent.)
 - * Chocolate Covered Liquid Cherries.
 - (N) Super Extra Chocolate Covered Caramels. (Ghi-cose 20 per cent.)
- Wilbur, H. O., and Sons, Philadelphia, Pa.
 - ★ Wilbur's Vanilla Chocolate Buds. (Extravagant praise of flavor and general excellence.)

V

CANNED GOODS 1

THERE are many popular fallacies and rumors afloat regarding this class of food materials. The name itself is unfortunate. Canned goods, strictly speaking, include foods which are sterilized by heat only and kept in air tight containers, whether they be tin cans or glass jars. For this reason, only fruits, milks, vegetables, and soups with their related products are treated in this section.

Many confuse canned goods with preserves, which represent quite a different class of products such as jams, jellies, fruit syrups and catsups, all of which are combined with sugar and other condiments or are otherwise compounded. The time was when peas were colored with copper, greencorn was sweetened with saccharin, and preservatives of various kinds, salicylic, benzoic, sulphurous acids, and borax were used to aid the keeping process. These evil practices have disappeared in the case of true canned goods. Benzoate, borax and saccharin and copper sulphate are tabooed.

¹ For canned and dried fish, and meats, see pages 122 and 150.

The main points to be considered are the quality of the raw materials, the sanitary conditions of manufacture, full weight and measure, and the possible presence of tin, dissolved from the container. On the first two points, chemical analysis cannot throw much light. We can only base our opinion upon inspection, taste, and general knowledge of the standing of the firm concerned.

Net weight will soon be stated on all cans under the law, and in this connection a slack fill must also be considered, as obviously a can of tomatoes that weighs two pounds, but is largely water, is not so good as one that is a little under weight, but contains more solids. Variations in weight will occur in the output from the same factory, and therefore the examination of a few samples may be misleading. We are reporting, therefore, the data obtained on the goods examined, for what they are worth, and as a general guide to the quality of the output of the several manufacturers named. Three hundred milligrams of tin per kilo (5 grains in 2.2 lbs.) are tolerated by official regulation. We have not starred any product which contained 200 milligrams or over, and in most cases only very small amounts are present. Certain vegetables, such as asparagus, act upon the container to a greater extent than others and

will always be higher in tin. For some vegetables, lacquered cans are used. Beets, especially, are put up in this way; whereas in other cases (beans and asparagus), the lacquer seems to affect the flavor of the product and cannot so well be used.

The National Canner's Association has a central laboratory, whose work is conducted by chemists and bacteriologists formerly connected with the Bureau of Chemistry, and every effort is making to solve these problems in the canning industry as rapidly as possible, with a view especially to the elimination of tin salts. Plainly, it is with minor evils that we have to do in the canning trade.

While I cannot agree with those who hold that canned goods are better than fresh, the addition of wholesome canned fruits and vegetables to the dietary in Winter, and for the use of those who are of necessity cut off from a fresh supply, is a blessing of incalculable value and only attended by a minimum of danger. In my opinion, it would be a great step forward if the package should carry not only the net weight, but also the date of manufacture, so that goods could not be held too long on the grocer's shelves. This is especially true in the case of condensed milk, and such vegetables as asparagus, fish products, ber-

ries, etc., some of which are especially apt to attack the inner surface of the container.

Another difficulty in passing upon the output of canned goods is that many of them are put up in plain cans and handled by jobbers under their own names, so that one cannot be sure that the supply of any particular distributor will be uniform. The terms used to express different grades of canned goods mean but little to the canners and less to the consumer. The simplification of the label in this regard, the abandonment of such meaningless terms as "Superfine," "Extra Quality," "Early June, Extra Sifted," etc., and the presence of the date, the name of the manufacturer and the true net-weight on each can, would be a boon to the housekeeper and enable her to buy more intelligently and permit of a more accurate estimate of the various grades and brands in relation to their price.

Notwithstanding these criticisms, which are largely matters of labeling and distribution, the canned goods supply can be given as large a measure of approval as could be accorded to any single class of food products. Increasing confidence of the people in the quality of these sterilized products since the great body of manufacturers have become affiliated in a National As-

sociation pledged to purity, wholesomeness, and honesty of its products is strengthening the commercial side of the canning industry and promoting the efforts of food officials and hygienists who are striving for the highest ideals in food production.

FRUITS (SEE ALSO DRIED FRUITS)

(Starred products (*) are rated at 85 to 100; (N) indicates a noncommittal rating between 76 and 84; disapproved products (D), rated at 75 and less; see Introduction and page xxviii for details as to method of rating.)

TESTED FRUITS

Boyle, John, Company, Baltimore, Md.

- (N) Strawberries, Victory Brand. (A plain can (not lacquered), artificial color claimed, but none detected. The proportion of liquid solids was too high, though the whole can was over weight.)
- California Fruit Canner's Association, San Francisco, Cal. (Packed for Park and Tilford, New York Oity.)
 - * Apricots, Del Monte Brand Extra Quality.
 - ★ Cherries, Royal Anne, Del Monte Brand, Extra Quality.
 - * Hawaiian Pineapple, Gold Leaf Extra, Sliced.
 - ★ Logan Berries, Del Monte Brand Extra Quality.
 - ★ Peaches, Lemon Cling, Del Monte Brand, Extra Quality.

- ★ Peaches, Yellow Free, Del Monte Brand Extra Quality.
- * Pears, Bartlett, Del Monte Brand Extra Quality.
- ★ Plums, Egg, Del Monte Brand Extra Quality.
- ★ Plums, Green Gage, Del Monte Brand Extra Quality.

Cobb Preserving Company, Fairport, N. Y.

★ White Cherries, Navy Brand. (Amount of liquid slightly high in proportion to the fruit—50 per cent. of each. The can was over weight.)

Davies, K. M., and Company, Williamson, N. Y.

★ Red Raspberries, Williamson Brand. (Liquid rather high in proportion to fruit (63 per cent. of juice), total weight very good.)

Griffith-Durney Company, San Francisco, Calif.

- * Apricots, California, Troubadour Brand.
- * Bartlett Pears, California, Troubadour Brand.
- ★ Cherries, Royal Anne, Troubadour Brand.
- ★ Plums, Egg, California, Troubadour Brand.
- * Plums, Green Gage, Troubadour Brand.

Hawaiian Pineapple Company, Honolulu.

★ Hawaiian Sliced Pineapple, Paradise Island Brand.

Hunt Brothers, Haywood, Cal.

- * Apricots.
- * Bartlett Pears.
- * Cherries, Royal.
- * Peaches.

Lanning and Son, William, Bridgeton, N. J.

* Blackberries in Syrup, Silver Lake Brand.

* Pears, Silver Lake Brand.

Leggett, Francis H., and Company, New York, N. Y.

* Premier Strained Cranberry Sauce.

Libby, McNeill and Libby, Chicago, Ill.

* Bartlett Pears.

★ Extra Lemon Cling Peaches.

* Sliced Hawaiian Pineapple.

Siegel Cooper Company, New York, N. Y.

(N) Hawaiian Sliced Pineapples, Fountain Brand, Extra. (Unwarranted medicinal claims "specially valuable in case of diphtheria, etc." Quality good.)

* Lemon Cling Peaches, Fountain Brand.

MILK PRODUCTS, INFANT'S FOODS, ETC.

It often happens that infants are deprived of their natural diet. i.e., the milk of a healthy mother. There are also sometimes derangements of nutrition in which case the child does not assimilate normal food. To meet these conditions manufacturers and physicians have endeavored to supply nutritious substitutes for the child's natural diet. It is hardly necessary to say that none of these efforts have met with complete success. There is no so-called commercial "infant's food," that can be recommended for general use. The anxious mother vainly turns from one vaunted preparation to another to avoid diarrhea, or check the loss of weight of a wasting child. Most of the makers of infant foods recognize the fact that pure milk, scientifically modified, is the best substitute for mother's milk. The milk of the Holstein cow is said to be particularly adapted to infant feeding, by reason of its relatively lower content of fat, and the smaller size of the fat globules, resembling human milk more nearly in these particulars. Goat's milk, unfortunately not utilized in this country, is probably better adapted to the

infant's use than cow's milk, and the animal itself is less prone to tuberculosis.

The wise physician, guided by the principles of scientific dietetics, will endeavor by slight modifications of pure, clean, fresh milk, from healthy animals (usually effected by varying degrees of dilution, and the addition of milk sugar and lime water and sometimes barley water), to determine the diet best suited to the particular case. A large percentage of the commercial infants' foods are offered, not as complete foods, but as milk modifiers. One of the virtues urged in their behalf is the substitution of sugar and dextrin (made by the action of enzymes on starch obtained from cereal products) for the natural milk sugar or lactose. It is difficult to believe that nature has made a mistake in placing lactose instead of sucrose, maltose or dextrin, in the milk of the mammals. That infants often thrive on these substitute sugars is an evidence of the ability even of the babe to tolerate a strange environment rather than a proof of the waywardness of nature. It is more logical to believe that lactose, the natural milk sugar of little sweetness, is not only the normal, but also the best carbohydrate for the baby.

The infant's foods of commerce may be divided into the following general classes:

- 1. Milk products (including condensed milk, sweetened or unsweetened, the latter being known as "evaporated" milk and dried milks).
 - 2. Malted cereals.
- 3. Mixtures of malted cereals, with milk, improperly called "malted milks."
- 4. Mixtures of sugar, malt, dextrose, dextrin, eggs, etc.

The condensed milks are not offered exclusively for infant's foods, but for general nutrition, and as a food for grown people, for use in coffee, for convenience in traveling, camping, etc., and for general use when fresh milk is not available or is under suspicion, they afford a most valuable substitute. Nearly all labels and advertisements, however, commend them for infant feeding. Sweetened condensed milk, consisting as it does, largely of sugar (often over 40 per cent.) should never be used for infant feeding. This amount of sugar unbalances the ration, increasing enormously the proportion of carbohydrates and thus tends to derange digestion and promote the undue formation of fat, mistakenly hailed by the mother as an indication of healthy nutrition. Growth. firmness of flesh, color and animation are much surer signs of successful feeding than is the

"creased plumpness," so lauded by venders of infant foods.

When traveling, or if a pure whole milk cannot be secured, or in hot climates where refrigerating facilities are limited, the unsweetened condensed milk, sometimes called "evaporated milk" may afford the second best choice. By reason of the high temperatures required to sterilize and condense the product, such milk undergoes marked changes of character, which many medical authorities consider affect its nutritive properties for infants, the mineral ingredients especially being less easily assimilated. Though this evidence is questioned by some, it is well to be on the safe side, and while many infants thrive on a diet of condensed milk others so fed have suffered from rickets and other diseases of deranged assimilation.

Condensed milks are properly made from the pure, clean, fresh milk of healthy cows. Practically much of it is made of milk from very unsanitary cows, and handled in unsanitary dairies. There is no reason to believe that the milk in many of the dairies is better than some of that sold in its natural state. The evaporated product, however, has the distinct advantage over ordinary market milk, in so far as diseased germs and dirt are con-

cerned, that it is strained and sterilized in the condensaries; the sweetened product is not sterile.

According to the official standards, condensed milk contains not less than 28 per cent. of solids and of these 7.7 per cent. is fat. Subsequent unwarranted modification of the standard requires that the sum of total solids and fat shall be 34.3 per cent., of which 7.8 should be fat. Many of the condensed milks on the market fall even below this. While in my opinion the official standards are not as high as they should be, having been established by act of Congress they can be changed only by Congressional direction. But although the standards now represent minimum requirements for total solids and fat, there has been a long continued attempt on the part of many manufacturers to have them lowered still further. The claim has been persistently made that it was impracticable to condense milks to the minimum degree required, namely, 28 per cent. of solids, by reason of the fact that the organic salts present in milk, mostly compounds with citric acid, would crystallize out and form a sandy, gritty deposit objectionable to the consumer. Also the argument is made that when condensed milks are made from whole milk containing 4 per cent. of fat (although this is about the general average) the required total solids

should be lower, since it is claimed to be difficult to keep the "excessive quantity" of fat from separating and forming a kind of thick cream. In my opinion both of these contentions are without foundation, and this view is borne out by the sample of the imported evaporated milk which we have examined, which contains about one-fifth more total solids and fat than is required by the minimum standards of this country. If a manufacturer in Switzerland can produce a very satisfactory product containing over 33 per cent. of solids and 91/2 per cent. of fat, an American manufacturer should not grumble because he is required to have 28 per cent. of solids and about 7.7 per cent. of fat. Moreover, the physical appearance of the imported sample was most excellent, being soft, creamy, devoid of grit, and showing no evidences of the separation of fat. It is more probable that the separation referred to is due to long keeping, and not to an excessive condensation. Evaporated milks should be distributed in such a manner that they will not remain too long upon the shelves of the dealers.

Skimmed milk cannot be advised for infants, and evaporated milks, especially milks recommended for infant feeding, should be held strictly up to the standard for total solids and fat. Dried

milk or milk powder differs from condensed milk in being almost free from moisture. It has all the faults and virtues of condensed milk and may serve a most useful purpose when the fresh product cannot be obtained.

When cereals, wheat, rye, barley, etc., are finely ground and made into a paste by the admixture of water at a high temperature, they are readily acted on by malt which renders the starch soluble, changing it into sugars (maltose and dextrose), and into dextrin. The infant utilizes starch only with difficulty and this process makes it more easily digestible. No normal infant at its mother's breast, however, requires food of this kind. Nature is the safest guide, and if such preparations have any value, it is only in abnormal conditions. The use of simply modified milk, as previously described, up to the sixth month, and the gradual introduction of cereal gruels, fruit juices, etc., after that time is in general a procedure to be preferred to the use of so-called "infants' foods."

Malted milks represent a large class of misbranded products, consisting really of a certain amount of milk mixed with malted cereals, the latter usually forming the principal part of the product. They are nutritious and convenient materials for grown persons, and some invalids, but are too high in carbohydrates (starches, and sugars) foreign to an infant's natural food to be especially adapted to this purpose. Often the percentage of fat is so low as to indicate that even the small amount of milk present was skimmed milk. Special comment on the samples of these classes of infant's foods examined will be found in connection with the respective products.

TESTED MILK PRODUCTS, INFANT'S FOODS, ETC.

(Starred products (**) are rated at 85 to 100; (N) indicates a noncommittal rating between 76 and 84; disapproved products (D), rated at 75 and less; see Introduction and page xxviii for details as to method of rating.)

American Druggist's Syndicate.

(D) A. D. S. Malted Milk. (Not a whole milk; only 1.2 per cent. of fat found. Extravagant claims as to quality and being "The best of all foods for infants and invalids.")

American Malted Food Company, Milwaukee, Wis.

- (D) Thompson's Malted Food—Malted Milk. (Too low in fat in proportion to protein and lactose for a whole milk; indicates skim milk; lactose so high as to indicate that it is added as such (0.54 per cent. of fat and 20 per cent. of lactose found.)
- (D) Thompson's Malted Beef (Peptone). (Analysis practically the same as for malted milk; not

enough beef peptone to give character to the product.)

Aurora Condensed Milk Company, Rotterdam, Holland.

★ Sweetened Condensed milk. (Most excellent product, about 1/5 higher in milk solids and fat than the American output.)

Benger's Food, Ltd., Manchester, Great Britain.

(D) Benger's Food. (Chiefly flour, containing a little diastase and sodium bicarbonate; claims for digestibility and nutritive value unwarranted. Not desirable for infants.)

Berna Milk Company, Thoune, Switzerland.

★ Condensed Swiss Milk, sweetened with sugar.

(About ⅓ higher in milk solids and fat than the American samples. Claim "Absolutely Pure" and directions for infant feeding, objectionable, but product is not especially recommended for this purpose.)

Bernese Alps Milk Company, Switzerland.

★ Evaporated unsweetened Swiss milk. (A most excellent product, fully ⅓ higher in solids and fat than our best American products. Claim "Can be used as an excellent cream" objectionable, as it has only half the butter fat of a true cream.)

Borden's Condensed Milk Company, New York, N. Y.

(N) Condensed Milk, The Gail Borden Eagle Brand.

(A most excellent sweetened milk for general use; not starred solely because of extravagant

claims for its special suitability for infants' feeding, for which use it is deemed most objectionable, as it contains over 40 per cent. of sucrose, an element not found at all in the infants' normal food.)

- ★ Evaporated Milk, Borden's Peerless (pound cans).
- (N) Evaporated Milk, Borden's Peerless (six ounce can). (The large cans were of excellent composition, but two samples of the small cans, same brand, were low both in solids and fat. May have been accidental.)
- ★ Evaporated Milk, Unsweetened, St. Charles Brand.
- ★ Malted Milk, Borden's. (A whole milk mixed with malted cereals; an excellent and nutritious food for adults but not suitable for infant feeding in general as claimed, and not approved for this purpose. Much less objectionable than the sweetened condensed milk for this purpose.)

Denmark Condensed Milk Company, Denmark, Wis.

(N) Danish Prize Evaporated Milk. (Not sufficiently condensed. Exaggerated claims made for quality. It is not the "leading brand of the world.")

Helvetia Milk Condensing Company, Highland, Ill.

★ Our Pet Brand Unsweetened, Sterilized, Evaporated Milk.

Hires Condensed Milk Company, Philadelphia, Pa.

(N) Hires Condensed Milk. (Milk sufficiently condensed, but either a product low in fat was used or it was partly skimmed; should be labeled "Sweetened," contains about 45 per cent. of sugar.)

Horlick's Malted Milk Company, Racine, Wis.

★ Horlick's Malted Milk. (See Borden's.)

Imperial Granum Company, New Haven, Connecticut.

(D) Imperial Granum—The Great Prepared Food.

(Practically a partially roasted flour. Exaggerated claims as to its value as a food for infants and invalids. Especially does it contain too much starch for an infant's food.)

Libby, McNeill and Libby, Chicago, Illinois.

- ★ Condensed Milk, Sweetened. (Contains about 44 per cent. of sucrose. No reference found to infant feeding.)
- (N) Evaporated Milk, Sterilized, Unsweetened. (A good whole milk but condensation not carried quite far enough. Six samples averaged 7.7 per cent. of fat and only about 26 of solids.)

Mead, Johnson and Company, Jersey City, N. J.

(N) Mead's Dextri-Maltose—Malt Sugar. (Essentially a mixture of dextrin and maltose, prepared by enzymic action, not considered a de-

sirable substitute for lactose in modifying milk for infant feeding in normal conditions.)

Mellin's Food Company, Boston, Mass.

(N) Mellin's Food. (A dried malt extract from wheat and barley, mostly maltose with some dextrin. Superior to some infant's foods, in that it does not contain starch, but it is not a "true substitute for mother's milk," even when combined with milk as recommended.)

Merrell Soule Company, Syracuse, N. Y.

(D) Klim. (This is really a dried skimmed milk for cooking purposes, contains only 0.21 per cent. of fat, while a similar whole milk preparation would contain 30 per cent. This is milk spelled backwards in more ways than one; claim "For all cooking where milk is needed" not warranted.)

Mohawk Condensed Milk Company, New York, N. Y.

(N) Sweet Clover Brand, Sweetened Condensed Milk.

(A good product containing standard amounts of fat and solids but is nearly half sucrose and still claims to be the "most perfect substitute for mother's milk," which contains none.)

Nestlé, Henri, 99 Chambers Street, New York, N. Y.

(N) Nestlé's Food. (Contains some starch but has a good content of fat, protein and soluble carbohydrates. Not a "perfect nutriment for infants" as claimed.)

Pacific Coast Condensed Milk Company, Seattle, Wash.

(N) Carnation Brand Sterilized Evaporated Milk.

(Made of whole milk but insufficiently condensed. Is very low in total solids but good fat content. Extravagant claims as to quality.)

Patch, The E. L., Company, Boston, Mass.

★ Patch's Powdered Sugar of Milk. (A pure lactose or milk sugar for modifying the milk for feeding of infants.)

Smith, Kline and French, Philadelphia, Pa.

(D) Eskay's Albumenized Food. (Contains too much starch to be used for an infant's food. Claim that it is "albumenized," and is the "most nutritious, most palatable food upon the market," not warranted as protein is low.)

Van Camp Packing Company, The, Indianapolis, Ind.

(N) Evaporated Milk, Sterilized, uncolored, unsweetened. (Not "a perfect food for infants" as claimed. Apparently a whole milk but condensation not carried far enough, to give standard amount of total solids.)

SOUPS, EXTRACTS, BOUILLON CUBES, ETC.

No soups are high in nutritive value as they contain so large a percentage of water, but they have a dietetic value notwithstanding. The soups approved by chemical analysis, odor, flavor and condition of the can gave evidence of having been prepared in a sanitary way from good materials, but the highest rating was not accorded these products because it is impossible to determine definitely from such inspection the quality of the raw materials used.

The meat extracts and bouillon cubes have been included in connection with the soups, for convenience, though, of course, they are not, strictly speaking, canned goods. It cannot be too often repeated that neither a meat extract nor a beef cube represents concentrated nourishment. On the contrary, the bouillon cubes especially contain large amounts of salt and the nitrogenous principles present are stimulative rather than nutritious. For flavoring a cup of hot water, to take the place of a clear consommé, or to be used in the kitchen for flavoring purposes, they are useful and con-

venient. They should never be depended upon for a child's luncheon or for nourishment for an invalid.

TESTED SOUPS, EXTRACTS, BOUILLON CUBES, ETC.

Armour and Company, Chicago, Illinois.

- * Extract of Beef.
- (N) Bouillon Cubes. (Salt high—67 per cent., claims mildly objectionable, not a "satisfying substitute for a heavy lunch," etc.)

Beardsley's Sons, J. W., New York, N. Y.

(N) Vegex, A vegetable extract. (A yeast extract of good odor and flavor containing 35 per cent. of nitrogenous material, not all of which however is protein. Value is stimulative rather than nutritive, as in all such products. Claim "extremely high food value" is therefore misleading.)

Burnham, E. L., Company, New York, N. Y.

★ Clam Bouillon. (Not "highly" concentrated as claimed.)

Campbell, Joseph, Company, Camden, N. J.

- * Condensed Soup, Asparagus.
- ★ Condensed Soup, Beef.
- * Condensed Soup, Bouillon.
- * Condensed Soup, Celery.
- ★ Condensed Soup, Chicken.

- * Condensed Soup, Chicken Gumbo.
- * Condensed Soup, Clam Chowder.
- * Condensed Soup, Consommé.
- * Condensed Soup, Julienne.
- ★ Condensed Soup, Mulligatawny.
- * Campbell's Mock Turtle Soup.
- * Condensed Soup, Mutton Broth.
- ★ Campbell's Ox Tail Soup.
- * Condensed Soup, Pea.
- * Condensed Soup, Printanier.
- * Condensed Soup, Tomato Okra.
- ★ Condensed Soup, Tomato.
- ★ Condensed Soup, Vegetable.
- * Condensed Soup, Vermicelli.

Cudahy Packing Company, South Omaha, Nebr.

(N) Extract of Beef. (Not "the best" though it has a good nitrogen content—coagulable nitrogen not in extract at all—finished product does not "represent about 45 lbs. of lean meat to 1 pound of solid extract," in nutritive value.)

Franco-American Food Company, Jersey City, N. Y.

- * Clear Oxtail Soup.
- * Puree of Tomato.
- ★ Clear Vegetable Soup.

Hoyt, W. M., Company, Chicago, Illinois.

* Yours Truly Condensed Tomato Soup.

Knorr, C. H., Germany.

(N) Barley, Knorr Soup. (Solid soup tablets; con-

venient and wholesome, serving a useful purpose for campers, etc., but lacking in flavor and appetizing odor; bouillon cubes about like Steero—no false nutrition claims, statement applies to whole output.)

- * Bouillon Consomme.
- (N) Cabbage.
- (N) Egg Quodlibet.
- (N) Green Pea.
- (N) Yellow Pea.
- (N) Mock Turtle.
- (N) Mushroom.
- (N) Mutton Broth.
- (N) Onion.
- (N) Oxtail.
- (N) Petite Marmite.
- (N) Potato.
- (N) Regina.
- (N) Tapioca Julienne.
- (N) Tomato.

Libby, McNeill and Libby.

- ★ Concentrated Oxtail Soup.
- * Concentrated Tomato Soup.
- * Concentrated Vegetable Soup.

Liebig's Extract of Meat Company, London.

(N) Liebig's Extract of Meat. (An excellent product not starred solely because of advertisements advocating its addition to milk for children,

- claims as to increasing the assimilation of milk, etc., deemed most misleading and undesirable.)
- (N) Liebig Company's OXO Bouillon Cubes. (Corneille David and Company, Distributors, New York, N. Y.) (Claims "strengthening" "a meal in a minute," etc., misleading, although composition is good for this class of products.)
- National Pure Food Company, 149 Broadway, New York, N. Y.
 - (N) Puro Soup—Beef. (Powdered—same comment as on Knorr's.)
 - (N) Puro Soup-Chicken.
 - (N) Puro Soup-Green Turtle.
 - (N) Puro Soup-Lentil.
 - (N) Puro Soup-Vegetable.

Richardson and Robbins, Dover, Delaware.

* Chicken Soup.

Royal Specialty Company.

* Anker's Bouillon Capsules.

Schieffelin and Company, New York, N. Y.

★ Steero Bouillon Cubes. (Very good composition nutrition claims withdrawn, salt content relatively moderate and presence declared on label.)

TESTED CANNED VEGETABLES

Austin-Nichols and Company, New York, N. Y.

- * Asparagus, Sun Beam Pure Food, California.
- * Beans, Lima Scottish Chief Green, Extra.
- (N) Beans, Stringless Broadway Brand. (Slack fill, 11 oz. solids found, 13 called for.)
 - * Corn, Republic Sugar.
 - * Corn, Scottish Chief Sweet.
 - * Peas, Scottish Chief Sifted Early June.
 - ★ Peas, Republic Sifted Early June.

Boyle, John, Company, Baltimore, Md.

- * Spinach, Victory Brand Early Garden.
- * Spinach, Glenmore Early Fall.
- * String Beans, Victory Brand.
- ★ Tomatoes, Glenmore Brand.

Brakeley, Joseph, Inc., Freehold, N. J.

★ Beans, Lima, Sinclare Brand.

California Fruit Canners' Association, San Francisco, Cal.

- * Asparagus Tips, Del Monte Green.
- ★ Asparagus, Del Monte Brand Extra Quality Colossal Green.

Cresca Company, New York, N. Y. (Packed in France.)

- * Artichokes, Cresca, Whole French Natural.
- * Artichoke Bottoms, Cresca Extra. (Tendency to short weight.)
- * Mushrooms, Cresca Stuffed.
- * Mushrooms, Powdered.

- DeGroff, Lewis, and Son, New York, N. Y.
 - * Peas, Health Brand Sifted Early June.
 - ★ Corn, Health Brand Food Products, Sweet.
 - * Spinach, Good Honest Brand.
 - (N) Stringless Beans, Good Honest Brand. (Slack fill—11 oz. solids, 13 oz. called for.)
- Dunbar, G. W., Sons Company, New Orleans, La.
 - ★ Okra and Tomatoes, Fresh.
- Frederick City Packing Company, Frederick City, Md.

 * Succotash, Pride of the Valley.
- Green Bay Canning Company, Green Bay, Wis.
 - (D) Beets, Lazarre Brand Blood Red, Table. (Plain can—all beets, should be in enameled container—tin content too high though within legal limits.)
- Greenhut-Siegel Cooper Company, New York, N. Y.
 - ★ Corn, Milford Brand Extra Standard Tender Creamy Sweet.
- Haserot Canneries Company, The, Cleveland, Ohio.
 - * Kornlet.
- Heinz, H. J., Company, Pittsburgh, Pa.
 - ★ Pork and Beans, Oven Baked. (Not enough pork to warrant name.)
 - * Beans, Baked with Pork and Tomato Sauce.
 - * Beans, Baked in Tomato Sauce without Pork.
 - ★ Kidney Beans, Baked.

Illinois Canning Company, The, Hoopeston, Ill.

* Kidney Beans, Joan of Arc.

Koenig and Schuster, New York, N. Y.

* Lima Beans, Queen Tiny.

Leggett, Francis H., and Company, New York, N. Y.

- * Beans, Nabob Lima.
- * Corn, Premier Brand.
- (N) Peas, Premier Run of the Garden. (Slack fill —49 per cent. liquid, 33 per cent. is a good fill.)
- (N) Spinach. Nabob. (Slack fill—about twice the amount of water necessary.)

Liss, George and Company, New York, N. Y.

★ Peas, The Highwood Extra Sifted Early June.

Libby, McNeill and Libby, Chicago, Ill.

- * Asparagus, Special Extra.
- * Asparagus, California.
- ★ Pork and Beans. (Tendency to short weight; too little pork to justify name.)
- ★ Pork and Beans, with Tomato Sauce. (Too little pork to justify name.)
- * Sauer Kraut, Hanover Brand.

McIlhenny Company, Avery Island, La.

* Tabasco Brand Whole Okra.

Middendorf and Rohrs, New York, N. Y.

- ★ Lima Beans, Fairfield Brand.
- ★ Lima Beans, Dellford Brand Tiny.
- * Lima Beans, Nectar Brand Green.
- * Beets, Fairfield Brand.

- Numsen, William and Sons, Inc., Baltimore, Md., and Benesso, Ill.
 - (D) Pumpkin, Clipper Brand. (Tin too high, over 1000 mg.)
- North Maine Packing Company, Corinna, Maine.
 - ★ Lentils, Royal Brand Finest Quality, Imported, in Tomato Sauce.
- Olney, Burt, Canning Company, Oneida, N. Y.
 - (N) Beans, Refugee. (Tin too high, though within permitted limits; too much water.)
 - * Beets, Garden.
 - * Corn, Sweet, Baby Kernel.
 - * Peas, Burt Olney's Sifted Early June.
 - * Spinach, Garden.
- Phillips Packing Company, Cambridge, Md.
 - ★ Peas, Golden Rule Brand, Early June.
- Seaman Brothers, New York, N. Y.
 - ★ Corn, White Rose Brand.
 - ★ Peas, White Rose Brand Sweet Wrinkled.
 - ★ Peas, Savoy Brand.
 - ★ Spinach, White Rose Brand Fancy Cleansed. (Tendency to short weight but a good fill.)
 - (N) String Beans, Checker Brand. (Slack fill—11 oz. of solids found, 13 oz. called for.)
 - * Succotash, Warfield Brand.
- Siegel-Cooper Company, New York, N. Y.
 - (N) Stringless Beans, Milford Brand. (Slack fill—11 oz. found, 13 oz. called for.)

- Sills, John S., and Sons, New York, N. Y.
 - * Corn, Epicure Sugar.
 - (N) Peas, Epicure Early Sifted. (Short weight and too much water, 40 per cent., only 33 per cent. needed.)
 - * Tomatoes, Liberty Brand.
- Twitchell-Champlin Co., Portland, Maine, and Boston, Mass.
 - (D) Hatchet Brand Lima Beans. (Sub-label, "Packed from dried California lima beans," but picture of green pods on label is misleading, and it is not permissible to correct a wrong label by a sub-label. Should be called "Hatchet Brand, Soaked Dried Lima Beans." Wholesome, but inferior to green product and it is a questionable procedure economically, to can dried beans.)
- Van Camp Packing Company, The, Indianapolis, Indiana.
 - * Hominy, Van Camp's Hulled Corn.
 - ★ Pork and Beans, prepared with tomato sauce. (Too little pork.)
 - ★ Pork and Beans, Plain. (Too little pork.)

Webster, Fred L., Adams, New York.

* Spinach, Webster's Brand Cultivated.

White, John F., Mt. Morris, N. Y.

* Sweet Corn, Sweet Violet Brand, Choicest.

Williams, R. C., and Company, New York, N. Y.

* Corn, Royal Scarlet, Evergreen.

- ★ Peas, Royal Scarlet, Early Sweet.
- * Spinach, Robin Hood Brand.
- (D) String Beans, Economy Brand Refugee. (Nearly 1/2 water. Very slack fill.)

Yours Truly Company, Chicago, Ill.

* Pork and Beans, Yours Truly. (Too little pork.)

VI

CEREALS AND CEREAL PRODUCTS

BREAKFAST FOODS

MANY are the letters received in regard to the cereal breakfast foods, especially for children's use. One mother writes me: "Two small youngsters are anxiously awaiting your opinion in regard to their favorite shredded wheat, grape nuts, and post toasties." With few exceptions, a general statement will serve to give the facts in regard to all of the leading brands of cereal products and breakfast foods sold in packages. They are nutritious, cleanly products, containing the greater part of the nutriment of the grain and in some cases all of it. They are put up in a sanitary package and are convenient, and afford variety. You do not get anywhere near as much nutrition for the same amount of money as when you buy the simple grains, such as whole wheat, cornmeal, oatmeal, etc., in bulk. If you realize this, however, and are willing to pay for the convenience and variety, there is no reason why they should not be used. The commeal and

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oatmeal are somewhat heavy and heating, so that unless a person is doing heavy, physical work, it might be well to use a less concentrated food. The whole wheat and the old fashioned oatmeal and cornmeal can never be surpassed or equaled as wholesome economic foods, giving the greatest amount of nutriment for the smallest amount of money. It must be remembered that the amount of nutrition present is not the only point involved in wholesomeness and the coarser form of the natural grains and the presence of bran have a beneficial effect upon the bowels as well as furnishing additional mineral ingredients.

The processing of foods by "predigesting" and grinding, in my opinion, renders them relatively less wholesome though not less nutritious, inasmuch as performing the work of the teeth and the digestive organs for them decreases their activity and in time affects their functioning if it is carried too far. Nevertheless, the moderate use of the package cereals is an undoubted boon under our present conditions of life and they may fill a valuable and convenient place in the dietary, if not used exclusively.

The most serious charge to be brought against package cereals is the exaggerated claims made for their nutritive value. One becomes confused among so many products, each one of which is "the richest in nourishment," "the most easily digested, even by chronic invalids," "immediately converted into muscle and brain activity," etc., etc. Oatmeal is the heaviest of cereals and still so excellent a brand as Hornby's Steam Cooked Oatmeal claims to be "Good for invalids and those with weak stomachs," merely because it is thoroughly cooked.

"The road to Wellville" is to be traveled by eating Grape Nuts, a meaningless name applied to a mixture of cooked barley and wheat. The analysis of this product shows it to contain a very fair amount of protein, about 11 per cent., with an equal amount of sugar, and no more mineral ingredients than any wheat and barley mixture should have. There are no "brain foods" as such. It is a great pity for these products to be burdened with such senseless exaggerations as to leave the consumer in the dark as to the relative merits of different grains and the special conditions under which they should be used.

TESTED BREAKFAST FOODS

(Starred products (*) are rated at 85 to 100; (N) indicates a noncommittal rating between 76 and 84; disapproved products (D), rated at 75 and less; see Introduction and page xxviii for details as to method of rating.)

Cream of Wheat Company, Minneapolis, Minn.

★ Cream of Wheat. (Germ and bran of the wheat removed, a commendable product, but name somewhat misleading.)

Farwell and Rhines, Watertown, N. Y.

- (N) Barley Crystals. (Name meaningless. The whole grains are represented to be irritating and undesirable, giving a false impression.)
- (D) Cresco Grits. (Three packages showed insect infection. Claims to be "virtually free from bran or germ," "the fermenting elements of grain," misleading, as the whole grain is a better "waste repairing food.")

Five Kernels Food Company, The, Detroit, Michigan.

(N) The Five Food Kernels. (A mixture of different grains. Contains less nutriment than a good oatmeal, less mineral than a whole wheat.

Over burdened with such claims as this, "A more strengthening food than meat and potatoes," etc.)

H. O. Company, The, Buffalo, N. Y.

- * Hornby's Steam Cooked Oatmeal.
- (N) Force. (Good product; bad claims; not especially "good for indigestion"; amount of "bar-ley malt" used would not add any notable digestive properties; "No other cereal is as nutritious," misleading.)

Hygienic Food Company, Battle Creek, Michigan.

(N) Mapl-Flake. The Whole Wheat. (Not a true whole wheat. Low in nitrogen with an additional amount of bran added. Not enough maple present to warrant name. A good product over-burdened with claims.)

Jireh Diabetic Food Company, New York, N. Y.

(D) Jirch Diatetic Wheat Nuts. (Contains 50 per cent. of starch; claims to be a correct diet for diabetes, gout, rheumatism, etc., starch too high, and statement "proper proportion of carbohydrates" is evasive; amounts should be stated for protection of patient. Value of the change made in the starch is problematic.)

Kellogg Toasted Corn Flake Company, Battle Creek, Michigan.

- ★ Kellogg's Toasted Corn Flakes.
- ★ Toasted Wheat Biscuit. (Claims as to special process and retaining all of the vital elements of the whole wheat are somewhat overdrawn. Probably extra bran added.)

National Oats Company, St. Louis, Mo.

★ National Oats. (Slightly exaggerated claims as to special nutritive value.)

Postum Cereal Company, Battle Creek, Mich.

- * Post Toasties.
- (N) Grape Nuts. (Claims as to nutritive value ex-

aggerated; not a brain or nerve food in any special sense, name misleading.)

Quaker Oats Company, Chicago, Ill.

- * Quaker Puffed Wheat.
- (N) Quaker Toasted Corn Flakes. (Good but not the whole grain. Claims "We retain all the valuable health and strength giving elements," but is largely starchy part of corn; minerals and proteins low.)
 - ★ Quaker Puffed Rice. (Slightly exaggerated statements as to ease of digestion and assimilation. Recommended for dyspeptics, delicate children, etc.)
- (N) Quaker Rolled White Oats. (Excellent product for which impossible claims are made. Is not "The best oat meal made." Others are as good. Is not "better in quality and flavor than any cereal food made.")
 - * Fancy Grits, Granulated Hominy.

Ralston Purina Company, St. Louis, Mo.

* Ralston Wheat Food.

Seaboard Rice Milling Company, Galveston, Texas.

* Cereal, Comet Brand.

Seaman Brothers, New York, N. Y.

* White Rose Brand Hominy.

Shredded Wheat Company, Niagara Falls, N. Y.

★ Shredded Wheat. (Truly the whole wheat.)

Tyler, Byron, Kansas City, Missouri.

(N) Raw Food. (A mixture of ground wheat, ground nuts, whole raisins and oil, the latter somewhat rancid. A product not adapted to general merchandising, and most extravagant claims made as to the effects and desirability of raw food.)

Uncle Sam Breakfast Food Company, Omaha, Nebraska.

(D) Uncle Sam Health Food. (A mixture of flaked wheat and ground flaxseed, flavored with salt and a trace of celery seed. A harmless and nutritious mixture, 19 per cent. fat, and 19 per cent. protein, having laxative value, with such extravagant claims as "A perfectly balanced ration." "Rheumatism also asthma, are relieved, as well as kidney and bladder disorders." "Endorsed by leading physicians everywhere." "A substitute for meat, ready to eat," etc.)

United Cereal Mills Ltd., Quincy, Ill.

* Washington Crisps.

Wheatena Company, The, Rahway, N. J.

* Wheatena.

Yours Truly Company, The, Chicago, Illinois.

★ Yours Truly Certified Rolled Oats.

FLOURS, MEALS, AND BRANS

The main points to be considered in regard to a flour are that it should not be bleached by poisonons chemicals to produce an unnatural whiteness (and in attaining this ideal the housekeeper can help much by increasing the demand for the creamy loaf, instead of the one that is unnaturally white), the presence of the proper amount of nitrogen and mineral ingredients, fair weight and agreement with the label. More expensive flours such as buckwheat and rye are sometimes adulterated with others costing less. It is only the patent or the white flours, of course, which are bleached. In regard to the graham or whole wheat flours, there is much confusion and much difficulty in getting the true article. The trade, almost without exception, understands an "entire wheat" flour to be a flour between the patent and the graham, that is to say, some of the bran has been removed and it is more finely ground than the graham but coarser than the white. It is an intermediate product. Plainly this is an established trade misnomer, as the flour of the "entire wheat" should be just that, the entire wheat unbolted—and should

be the same as a true graham flour. Graham flour is not only brown in color, consisting of the whole wheat, including the bran with its additional protein and mineral ingredients, but it is an unbolted, coarsely ground product, which has a health value, in its effect upon the intestines apart from the question of nutrition. Here we have a fundamental difficulty involving long established trade conditions. The flour is separated into many different portions in the mill and the tendency is to reassemble the different products of the mill and combine them, giving many different grades of socalled graham flour, instead of coarsely grinding the unbolted whole grain as should be done. Of course, one may artificially make up a graham flour that will closely approach the composition of the true article, but it is easy to see how many variations will occur under these conditions, and too often excessive amounts of bran and low grade flour are combined to pass as graham or "whole wheat." The graham flours which have been starred in the following list are of high ash (mineral) and nitrogen content and comply with the standard for a true graham.

The two other classes of products calling for comment are the so-called self-rising flours and the gluten flours. The self-rising mixtures contain large amounts of baking powder, usually, which, in my opinion, is objectionable and you pay, of course, for the mere convenience of having some one add the baking powder to your flour for you. I cannot look with much favor upon these artificial mixtures. The claims for them are usually overstated and you pay a large price for the relative convenience afforded. They cannot be said to be objectionable, however, except on this score and the fact of the large amount of baking powder present.

The so-called gluten flours, from which all or a large part of the starch is supposed to have been removed to fit them especially for diabetics and others who cannot readily digest starch, have been much abused in labeling and the buyer has been led to believe that the product was virtually free from starch, when such is not the case. Labels should be carefully read and the amount of starch present should be declared on them to protect diabetics and those whose starch supply must be carefully controlled.

TESTED FLOURS, MEALS, AND BRANS

(Starred products (★) are rated at 85 to 100; (N) indicates a noncommittal rating between 76 and 84; disapproved products (D), rated at 75 and less; see Introduction and page xxviii for details as to method of rating.)

Christian Company, The, New York City.

- (D) Vieno Bran. ("Nature's remedy for constipation, stomach and intestinal trouble" misleading. In abnormal conditions of stomach and intestines it might be irritating. Good for constipation, but better to take bran as found in the whole grain, rather than to use it for medication in large quantities.)
- (N) Vieno-Self-Raising Bran Meal. (Not sufficient nitrogen and mineral ingredients for a first-class bran meal; not enough leavening to be called self-raising.)

Davis Milling Company, St. Joseph, Mo.

(N) Aunt Jemima's Brand Pancake Flour, Self Rising. (Rather extravagant claims and too large an amount of baking powder.)

Duluth Superior Milling Company, Superior, Wisconsin.

* Duluth Imperial Patent Flour.

Ekenberg Company, Cortland, N. Y.

- (N) Teco Brand Self-Rising Mixture of Buckwheat,
 Wheat and Corn Flour with Malted Buttermilk. (Large amount of baking powder present. Claims of superiority and value of malted
 buttermilk present questionable.)
- (N) Teco Brand Self-Rising Pancake Flour, a mixture of Malted Buttermilk (powdered) with wheat and corn flour. (Large amount of bak-

ing powder present. Amount of malted buttermilk small.)

(N) Teco Brand Buttermilk Boston Brown Bread Flour. (Amount of baking powder present rather large. Claims as to amount of buttermilk present dubious.)

Farwell and Rhines, Watertown, N. Y.

- * Pure Wheat Product-Cresco Flour.
- * Pure Wheat Product-Gluten Flour.

Forest Home Farm, Purcellville, Va.

* Forest Home Corn Meal.

Franklin Mills Company, Batavia, N. Y.

* Franklin Mills Flour. A fine flour, of the entire wheat with a part of the bran removed. (Not a true graham—a typical commercial "entire wheat" truthfully labeled.)

Greenhut-Siegel Cooper Company, New York, N. Y.

- * Fountain Brand Whole Wheat Flour. (A little of coarser bran removed as indicated by a rather low ash content; nitrogen good-a high grade wheat.)
- * Fountain Brand Patent Flour.

Hecker Cereal Company, New York City.

* Hecker's Pure White Wheat Graham Flour. (Ash content (mineral ingredients, due to bran) good, but nitrogen rather low.)

Hecker-Jones-Jewell, Milling Company.

(N) Superlative Self-Raising Flour Compound.

(Slightly short weight; amount of baking powder rather high, though less than any other self-raising flour examined. A good flour of its kind.)

Igleheart Brothers, Evansville, Indiana.

- (N) Swans Down Prepared Cake Flour. (A white flour low in nitrogen and gluten and so better adapted to cake making than bread making. Claims regarding special secret process and "best ingredients of the wheat" not warranted.)
- * Swans Down Cracked Wheat.

Jirch Diabetic Food Company, New York, N. Y.

(D) Jireh Flour.

(D) Jirch Diatetic Patent Barley. (Claim special value for diabetics; 60 per cent. and 67 per cent. of starch respectively present; misleading and might be dangerous.)

Johnson Educator Food Company, Boston, Mass.

- ★ Educator Packed Whole Wheat Flour. (Nitrogen and ash figures are just within minimum limits for a true whole wheat. Either a little bran removed or the wheat was not so "high grade" as claimed.)
- ★ Educator Packed Cold Ground New Process Rye Meal. (A good product but slightly short weight.)

Knox-Crutchfield, Richmond, Va.

★ Pamunkey Mills Old Virginia Cornmeal.

- Northern Light Milling Company, Owatomna, Minnesota.
 - (N) Northern Light Brand Compound Self-rising Buckwheat Flour and Wheat Flour. (Large amount of phosphate baking powder. Product said to be "The best ever used or money refunded.")

Northwestern Consolidated Milling Company, Minneapolis, Minn.

- (N) Ceresota Flour. (A good patent flour, but claims that it makes more bread to the barrel and is more nutritious than other patent flours, inaccurate.)
- Pillsbury Flour Mills Company, Minneapolis, Minn.

 ★ Pillsbury's Flour Best XXXX.

Purina Mills, St. Louis, Mo.

★ Purina Whole Wheat Flour. (A commercial, socalled "entire wheat" from which the bran has been partially removed, as stated on label. Not a true graham. A medium flour between the patent and the true "whole wheat.")

Roman Meal Company, Tacoma, U. S. A.

(D) Roman Meal. (Product consists largely of bran, some ground wheat, and probably rye and a small quantity of flaxseed; Claims—to "cure constipation" and "is the most nourishing food sold" as well; to contain "Flaxose, a secret

preparation by which pure ground flax is partly digested and deprived entirely of its disagreeable odor and taste," etc. Claims extravagant, though product is nutritious and would tend to prevent constipation.)

Russell-Miller Company, Minneapolis, Minn.

(N) Occident Flour. (A first-class patent flour but does not make "a better bread than that from any other flour" as claimed.)

Potter and Wrightington, Boston, Mass.

(D) Old Grist Mill Brand Flour, for health bread. (Exaggerated claims: Not a remedy for dyspepsia; apoplexy, Bright's disease, etc., not due to white bread; contains but little more nourishment than the best patent. Lacking in the bran necessary to substantiate claims that it is a remedy for constipation. Considerable insect infection of sample examined.)

Sands, Taylor and Wood Company, Minnesota.

(N) King Arthur Flour. (Sample examined was a first-class patent flour. Misleadingly branded, as this company are Boston jobbers and product appears to be manufactured by them in Minnesota.)

Shane Brothers and Wilson Company.

★ Golden Touch King Midas Flour. (Meaningless claim "The highest price flour in America and

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worth all it costs." Has no advantage over other standard patents.)

Siegel-Cooper Company, N. Y.

* Fountain Graham Flour.

Southwestern Milling Company, The.

* Aristos (flour).

Washburn-Crosby Company, Minneapolis, Minn.

* Gold Medal Flour.

RICE

The great point of interest in regard to rice is whether or not it is coated with talc or glucose which under the law is a practice that must be declared on the label, as the coating may conceal inferiority, and the housekeeper should be warned to wash such a rice thoroughly.

Rice may be white, having lost the outer brownish skin, and yet be uncontaminated with glucose and tale, and truthfully labeled as "uncoated," but should not be called "unpolished," as it is not the whole rice, the outer brown coat containing additional protein and mineral having been removed in the mechanical polishing process. It is claimed that beriberi, a very dangerous disease, is produced when white rice forms practically the whole of the diet, as it does in the Far East. While there is no reason to fear this where rice forms only a part of the diet and the necessary minerals and proteins are obtained from other sources, it shows that important food elements are lost in peeling the rice and that this practice tends further to "demineralize" the food supply.

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TESTED RICES

- Fischer, B., and Company, New York, N. Y.
 - ★ Hotel Astor Rice—Invalid's Food. Uncoated.

 (Not a whole rice but a good uncoated product, correctly labeled, mineral ingredients 0.37 per cent.)
- Carque, Otto, Los Angeles, Cal.
 - ★ Carque's Natural Whole Rice. (A true brown whole rice, 1.25 per cent. of mineral ingredients.)
- Kimball and Marxsen Rice Products Company, Chicago, Ill.
 - (N) White Swan Milk Rice, Granulated. (Some milk present but claims "In food value ranks higher than any other cereal." "A perfect food for children and for the sick and convalescent, for which it has no equal;" "accepted when all other foods are rejected," etc., not warranted.)
- Leggett, Francis H., and Company, New York, N. Y.

 ★ Natural Brown Rice. (A true whole rice, 1.03 percent. of mineral ingredients.)
- McFadden-Wiess-Kyle Rice Milling Company, Beaumont, Texas.
 - (D) Apex Brand, Unpolished. (An "uncoated" rice but claims made as to food value and great amount of nitrogen not warranted. Not an

"unpeeled" rice; it is polished, containing only 0.4 per cent. of mineral ingredients.)

Seaboard Rice Milling Company, Galveston, Texas.

- ★ Natural Brown Comet Brand Rice. (A true unpolished rice containing a few grains, not of the best quality. Extravagant claims formerly made with misleading statements as to rice being "the most nutritious and easily digested of all cereals," etc., have been corrected.)
- ★ Rice, Comet Brand Unkoted. (A polished rice, not coated. Excessive claims formerly made as to its being richest in elements of food value, "nothing added, nothing taken away," "most nutritious and easily digested of all cereals, etc.," have been withdrawn. Having been polished the outer coating had been taken away, as shown by the content of mineral ingredients, which was only 0.43 per cent., whereas the brown rice of the same brand contained 1.22 per cent. of ash. Two typical products now intelligently labeled.)

SPAGHETTI AND MACARONI

The wheat products made from the partially bolted and finely ground flour of hard glutinous wheat, and molded into various shapes, whether tubular, flat or cylindrical, are known as macaroni and spaghetti accordingly as they are of the larger or smaller variety. These products are excellent from the viewpoint of nutrition, palatability and economy. In some cases the ash (mineral ingredients) and nitrogen content indicate that a very large portion of the wheat grain has been utilized. For health purposes it would be advisable, if technically possible, to make macaroni out of the whole wheat When combined with tomato and cheese the dish is not only more palatable, but the amount of nourishment is increased and we have a better balanced ration. While the macaroni contains considerable protein, it is largely a starchy food and the cheese rounds out the ration adding more protein and fat, while the tomato gives flavor and vegetable acids. There is a rumor going about that one should never combine acids with starchy food. This is based on the fact that the digestion of starch begins in the mouth by the action of the saliva but is checked by the presence of the acid.

While this is theoretically true, the extent to which starch digestion is suspended in the stomach is well known. The work of the saliva begins again in the small intestine activated by the pancreatic secretion.

In some cases, eggs are incorporated with the wheat flour, which further increases the nutritive value of this food. The lecithin of the egg is especially important. Efforts to sell lecithin products in artificial preparations and as tonics are of dubious efficacy and the public will do much better to depend upon eggs, whole wheat and nuts for their lecithin. Unfortunately some manufacturers simulate the presence of egg by artificial color. This practice is wholly disreputable, and the misleading use of the word "egg" in the brand or name of the product cannot be ethically counterbalanced by the statement that there is no egg present. The claim that egg is used is substantiated by determining the notable increase in the lecithin components of the product. The consumption of macaronis might well be increased with advantage to the consumer from the point of view of both nutrition and economy.

TESTED SPAGHETTI AND MACARONI

(Starred products (*) are rated at 85 to 100; (N) indicates a noncommittal rating between 76 and 84; disapproved products (D), rated at 75 and less; see Introduction and page xxviii for details as to method of rating.)

Cleveland Macaroni Company, Cleveland, Ohio.

- (D) Golden Egg Alphabets, contain no egg. (Misbranded, not permissible to misname a product and make subsequent correction.)
- (N) Golden Egg Brand Macaroni. Contain no egg. (Brand name slightly misleading. Composition good-extravagant claims as to superiority.)

Foulds Milling Company, Cincinnati and Chicago.

- * Fould's Macaroni.
- ★ Fould's Spaghetti.

Freihofer's Vienna Baking Company, Philadelphia, Pa.

* Freihofer's Egg Macaroni. (Egg present in small amount.)

Heinz, H. J., Company, Pittsburgh, Pa.

* Spaghetti-L'Italienne. (Canned, with tomato sauce, ready for eating; contains 82 per cent. of moisture.)

Jireh Diabetic Food Company, New York, N. Y.

* Macaroni. (A good macaroni but has 58% of starch, not for diabetics, no special claim made

in this regard, though the name of the company might be misleading.)

Maull Brothers, St. Louis, Mo.

* Faust Brand Spaghetti.

Mueller, C. F. Company, Jersey City, N. J.

* Spaghetti.

Van Camp Packing Company, Indianapolis, Indiana.

★ Spaghetti—Italian Style. (A canned spaghetti, contains 76 per cent. of moisture.)

Woodcock Macaroni Company, Rochester, N. Y.

(N) Woodcock Macaroni. (Excessive claims as to special food value etc.; is a very good product containing slightly more mineral ingredients than is usual.)

Yours Truly Company, Distributors, Chicago, Ill.

* Yours Truly Macaroni Short Cuts.

* Yours Truly Spaghetti.

VII

CONDIMENTS

THE spices are examined to determine whether they come up to the established standards, are true to name, free from starch, hulls or other neutral adulterants which detract from the flavor, and are full weight. Considerable trouble is experienced on the latter score, especially on small packages, due in some cases it is said to the drying out of the mixture, and it is held that this should be allowed for. The loss of weight, however, should not always fall upon the consumer, even small weight packages should average the weight declared on the container, some packages running above and some below the required amounts. Of the compounded condiments, tomato catsup is probably of the most general interest and has been the product most adulterated. The use of benzoate of soda in these catsups has been fiercely contested, but has been abandoned by practically all well known manufacturers, with the exception of the Curtice Brothers. It has been proved that if clean, fresh, raw material is used and handled quickly in a sanitary way with complete sterilization there is no danger of spoilage and no need of an injurious chemical preservative. The chemically preserved products are also of lower quality because they can be made to keep with less concentration and when you buy a benzoated catsup you usually buy more water. The benzoated samples examined contained from 14 to 21 per cent. of solids while some of the leading brands depending on sterilization and concentration only ran as high as 33 to 38 per cent. Watch the label and see if benzoate of soda is declared.

The prepared salad dressings vary greatly in character. None of them compares in quality with a home-made mayonnaise. They are often thickened with starch or gum and artificially colored with turmeric or a coal tar dye to make up for the egg that is not there. Frequently no oil or egg at all is to be found. The two samples admitted to the star list contained egg and 35 and 50 per cent. of oil, were not artificially colored, and did not depend upon gum and starch for their thickening. They are probably as good products of the kind as are to be found. A salad dressing containing neither oil nor egg is not considered worthy of the name, though it may not be injurious.

The vinegars reported were tested carefully, to

determine whether or not they were true to name and had the amount of acetic acid required by the standard. While the fermented vinegars made from cider, apples, wine or grapes are of the choicest quality, having a finer flavor, the malt, sugar and glucose products or the distilled vinegars made from grains, if they are properly labeled and honestly sold, have legitimate uses. The housekeeper has a right to vinegar of a certain established strength. She can add water herself if the product is too acid. There is no reason why she should pay the manufacturer for water. A diluted acetic acid is not vinegar any more than diluted alcohol is wine. The original material from which the vinegar is fermented is what gives it its distinctive flavor and delicacy. There is no reason why the cheaper vinegars, such as spirit, distilled or grain vinegar, should not be used for pickling and in mixtures, if they are properly labeled and sold for a lower price. The artificial coloring of colorless vinegars, such as the spirit and glucose products, to give them the appearance of the cider and wine vinegars, is of course fraudulent. The housekeeper can do much to protect herself by carefully reading the labels and by not buying a product that is evasively branded or which declares artificial color.

TESTED CONDIMENTS

(Starred products (*) are rated at 85 to 100; (N) indicates a noncommittal rating between 76 and 84; disapproved products (D), rated at 75 and less; see Introduction and page xxviii for details as to method of rating.)

Austin-Nichols and Company, New York, N. Y.

★ Sunbeam Pure Food Tomato Catsup. (No benzoate, no artificial coloring and contains 30 per cent. of solids.)

Beech-Nut Packing Company, Canajoharie, N. Y.

- * Oscar's Sauce.
- ★ Tomato Catsup. (25 per cent. of solids.)

Bell, Wm. G., Company, Boston, Mass.

* Poultry Seasoning.

Colburn, The A., Company, Philadelphia, Pa.

- ★ Allspice.
- * Celery Salt.
- * Cinnamon.
- * Cloves. (Above minimum standard.)
- * Curry Powder.
- * Ginger.
- ★ Leaf Peppermint Cooking Herbs.
- * Leaf Savory.
- * Leaf Sweet Basil.
- ★ Leaf Thyme.
- * Mace.
- * Madras Turmeric.
- * Mustard.

- ★ Nutmeg. (Above minimum standard.)
- * Paprika.
- ★ Pepper, Black, Natuna Brand. (Was about 4 per cent. above minimum standard.)
- * Pepper, Red.
- ★ Pepper, White. (Was about 4 per cent. above minimum standard.)
- * Onion Salt.
- * Pastry Spice.
- * Sage, Rubbed.
- * Spiced Poultry Seasoning.
- * Sweet Marjoram.

(A good line of spices complying with the standards. Some are slightly above the minimum standard but the following extravagant claims can not be approved: "The standard goods of America, guaranteed of the finest quality, absolutely pure, and far superior to the standard required by law." This criticism applies only to large packages; small cartons are conservatively labeled.)

Colman, J. and J., London.

* Mustard.

Cresca Company.

★ Vinegar, Pinard Brand, Packed in France, Pure Grape Salad, Estragon Flavor.

Crosse and Blackwell, London.

- ★ Currie Powder, Genuine India—Pure Currie Powder.
- * Malt Vinegar, Pure.
- * Malt Vinegar Flavored with Tarragon.

Curtice Brothers Company, Rochester, N. Y.

(D) Tomato Ketchup. (Preserved with sodium benzoate and thin as compared with first class catsups; only 19 per cent. solids.)

Diamond Crystal Salt Company, St. Clair, Michigan.

★ Shaker Table Salt with 1 per cent. carbonate of magnesia.

Durkee and Company, E. R., New York, N. Y.

★ Salad Dressing and Meat Sauce. (Good quality for a commercial salad dressing containing egg and oil; not a "rich mayonnaise" as claimed.)

Fischer, B., and Company, New York.

- ★ Allspice, Strictly Pure.
- * Pepper, White.
- * Sage, Strictly Pure.

Frear, Fred, New York, N. Y.

(D) My Wife's Salad Dressing. (Colored with a permitted coal tar dye; only 8 per cent. of oil present and no egg determinable; harmless but not a true salad dressing.)

Gaidry, Lowell R., New Orleans.

★ Tabasco Pepper Sauce. (A good product; at first over-burdened with impossible claims as to di-

gestive and medicinal value; statements entirely revised.)

Heinz, H. J., Company, Pittsburgh, Pa.

- * Chili Sauce.
- * Tomato Ketchup. (33 per cent. total solids.)
- * Cider Vinegar, Pure Fermented.
- * Malt Vinegar, Pure Fermented.

Holbrook and Company, London, Manchester and Birmingham.

(N) Worcestershire Sauce. (Good quality but makes extravagant claims as to superiority and usefulness.)

Howard, J. F., Haverhill, Mass.

★ Salad Dressing. (Good quality, containing 50 per cent. of oil, egg, and no artificial coloring; sample examined slightly short weight.)

Koenig and Schuster, New York, N. Y.

★ Tomato Catsup, Princess Brand. (34.5 per cent. of total solids.)

Lea and Perrins, Worcester, England.

* Worcestershire Sauce.

Libby, McNeill and Libby, Chicago, Ill.

- * Chili Sauce, Pure.
- ★ Tomato Catsup, Pure. (38.6 per cent. of solids.)

McIlhenny, E., New Iberia, Louisiana.

(D) Tabasco Pepper Sauce. (Good quality, but absurd claims as to its being a preventative for

dyspepsia, relieving headache, neuralgia and rheumatism, hygienic and economic claims, etc.)

McMechen Preserving Company, Wheeling, W. Va.

(D) Prepared Mustard. (Colored with turmeric, very low in total solids (12 per cent.). Proportions of mixture given on label could not be present.)

Marzahl, W., 171 Spring Street, New York, N. Y.

* Cider Vinegar, Pure.

Mohawk Valley Cider Company, 73-75 Huron Street, Brooklyn, N. Y.

* Vinegar, Pure Cider.

(N) Vinegar, Pure White. (See Wayne County White Vinegar.)

Morehouse Mills, Chicago and Los Angeles.

(N) Horseradish-Mustard, Cream Brand, Prepared. (Contains turmeric and but little horseradish.)

(D) Mustard, Mrs. Morehouse's Cream Brand, Prepared. (Contains turmeric and gum.)

(D) Salad Dressing, Mrs. Morehouse's Cream Brand. (No oil or egg found; contains turmeric, gum and flavoring.)

National Onion Salt Company.

* Onion Salt.

New England Maple Syrup Company, Boston, Mass.

(D) Mustard, Golden Tree. (Price low, the turmeric and starch present lower the quality, though they are declared on label; not a standard "prepared mustard.")

- Olney, Burt, Canning Company, Oneida, N. Y.
 - * Ketchup. (21 per cent. of total solids.)
- Palisade Manufacturing Company, West Hoboken, N. Y.
 - ★ Tournade's Kitchen Bouquet. (A mixture of vegetable and meat extracts with flavoring principles; no preservatives; probably colored with caramel (burnt sugar); harmless and convenient, but not "indispensable" as formerly claimed.)
- Pritchard, E., 331 Spring Street, New York, N. Y., and Bridgeton, N. J.
 - (D) Tomato Catsup, Pride of the Farm. (Contained 0.17 per cent. of benzoate of soda; only one-tenth of one per cent. declared on the label. Had 21 per cent. of total solids.)
- Rabb, Charles, Inc., 237-239 W. 60th St., New York, N. Y.
 - (D) Tomato Catsup, Blue Ribbon. (Contained over two-tenths per cent. of benzoate and is very low in solid material, in common with most low grade products; 14.5 per cent. of solids.)
- Ritter Conserve Company, P. J., Philadelphia, Pa.
 - (N) Tomato Catsup, Pure, Whole. (No preservative or artificial color. Two of five samples were very low in total solids, the other three being satisfactory. Shows two grades of stock still on market.)

★ Tomato Catsup with Tabasco, Whole, Pure. (25 per cent. of total solids.)

Slade, D. and L., Company, Boston, Mass.

- * Cayenne, Absolutely Pure.
- * Cinnamon, Absolutely Pure.
- * Cloves, Absolutely Pure.
- * Celery Salt, Absolutely Pure.
- * Curry Powder, East India.
- * Ginger, Absolutely Pure.
- (N) Mace, Absolutely Pure. (Some question as to the species of mace used; possibility of admixture of Bombay or other wild mace. Evidence not conclusive.)
- * Nutmeg, Absolutely Pure.
- * Paprika, Absolutely Pure.
- * Pepper, Absolutely Pure.
- * Pepper, Absolutely Pure, White.
- * Pimento, Absolutely Pure.
- * Sage, Absolutely Pure.
- (N) Salad Cream, Absolutely Pure, Healthful. (No oil, but butter is used, a little egg, sugar, wheat starch, and spices, etc., as stated on the label.)
- * Savory, Absolutely Pure.
- ★ Spice, Absolutely Pure Pickling, Whole Mixed Spice.
- ★ Thyme, Absolutely Pure. ("Absolutely pure" claim objectionable as always; tendency to

slight short weight on some small packages. Quality very good.)

- Snider, T. A., Preserves Company, Cincinnati, Ohio.
 - * Chili Sauce.
 - * Tomato Catsup. (23 per cent. of solids.)
- Stickney and Poor Spice Company, Boston, Mass.
 - ★ Cloves, Absolutely Pure. (Claim objectionable.)
 - ★ Mustard, Extra Fine.

Tildesley and Company, Chicago, Ills.

- (N) Yacht Club Salad Dressing. (A small amount of oil and some egg; colored only with turmeric; good but hardly of star quality.)
- Wayne County Produce Company, Greenpoint, L. I., N. Y.
 - ★ Cider Vinegar.
 - (N) Spirit Vinegar, Pure White. (A good grain vinegar, true to type and properly labeled.

 This type is not a true aromatic vinegar at all and is inferior in quality and flavor to the wine and cider products.)
- Worcester Salt Company, New York City, N. Y.
 - * Ivory Shaker Salt.
- Yours Truly Company, The, Chicago, Illinois.
 - * Ground Paprika.
 - * Ground Pepper.
 - (D) Salad Dressing. (No oil present. Depends on

turmeric for color and gum for thickening; not permissible mixture for a salad dressing.)

- * Spices, Whole Mixed.
- * Tomato Catsup.

VIII

DESSERTS

TO EADY-TO-USE desserts like most time-R saving foods give you only fair quality at a relatively large price. It is not claimed that they are injurious but it is not considered that they are either high grade food products or economical. The Jello, Nesnah and Tryphosa desserts are probably the best of their kind, but consist mostly of sugar (about 85-90 per cent.), with a little gelatin, flavoring, and coloring matter, for which extravagant excellencies and great originality are claimed. As sugar is only five cents a pound, you can see that they are not an economical buy for the housewife unless her time is extremely valuable. Twenty cents a pound for sugar adds an item to the high cost of living! Gelatin desserts, freshly made, uncolored and flavored with fresh fruit juices must of necessity be superior in quality.

The straight gelatins themselves present a fundamental difficulty in that the line is too often not carefully drawn between glue quality and ed-

ible gelatin quality. Both are made from hides, bones, and horn pith, and it is the condition of the raw material and the treatment and temperature that differentiate the two. A high class glue and a low class gelatin are practically the same product. Only sanitary inspection could determine this point absolutely and it is for this reason that the highest rating has not been given to gelatins. The tests made, however, insure you that the finished products are harmless and of good quality. Another difficulty is the fact that many gelatin dealers buy up their gelatin from different sources and their output may vary in excellence. These are some of the fundamental difficulties in attempting to classify gelatins as to purity. We can only advise in general that those examined gave no odor on standing, had the proper degree of solubility and contained only minute traces, if any, of sulphur dioxide. No dangers are to be feared from eating these products but constant inspection alone can insure that sanitary raw material is used and the proper care taken during the process of manufacture.

TESTED DESSERTS

(Starred products (*) are rated at 85 to 100; (N) indicates a noncommittal rating between 76 and 84; disapproved products (D), rated at 75 and less; see Introduction and page xxviii for details as to method of rating.)

Baker, Franklin, Company, Philadelphia, Pa.

★ Baker's Premium Shred Cocoanut. (Label states "Prepared with sugar," contains about 24 per cent.)

Chalmers, James, Sons, Williamsville, N. Y.

★ Transparent Shredded Gelatin.

Ceylon Spice Company, Philadelphia, Pa.

(D) Instantaneous Tapioca. (Absurd claims as to being a "food for babies," "preventing prickly heat," etc. Product is good, though "instantaneous" claims are also overdrawn.)

Colburn, The A., Company, Philadelphia, Pa.

(N) New Process Hasty Tapioca. (A good product with such meaningless extravagant claims as "The standard goods of America," "Absolutely Pure," "Superior to the standard required by law.")

Cox, J. and G., Georgia Mills, Edinborough, Scotland.

★ Gelatin.

Crystal Gelatin Company, Boston, Mass.

★ Boston Crystal Gelatin.

Diamond Gelatin Company, Chicago, Ill.

(N) Diamond Delico, The Double Dessert-Straw-

berry and Orange; Mint-Lemon; Coffee and Cherry. (Colored with cudbear and other vegetable dyes, harmless but poor quality and the little flavor present is completely lost on exposure to air.)

Genesee Pure Food Company, Le Roy, N. Y.

(N) Jello Lemon. (About 85 per cent. sugar; and artificially colored with a harmless vegetable dye.

Not injurious but not "America's most famous dessert." Fruit flavors used mostly. Good of its kind but not of star quality.)

Hansen's Laboratory, Charles, Little Falls, N. Y.

- * Junket tablets.
- (N) Nesnah Desserts—Chocolate, Lemon, Imitation Raspberry. (86 per cent. to 96 per cent. sugar, gelatin and trace of permitted coal tar dye in two cases; not injurious but not high quality; exaggerated claims.)

Heinz, H. J., Company, Pittsburgh, Pa.

- ★ Gold Medal Mince Meat.
- * Heinz Plum Pudding.

Hipolite Company, The, St. Louis, Mo.

(D) Hipolite Snow-Mellow. (Essentially a mixture of corn starch and egg albumen. In no sense a substitute for eggs. Harmless, but not of good quality. Claim, "makes delicious icings, fillings, and meringues without eggs," misleading.)

- Knox, Charles B., Company, Johnstown, N. Y.; Montreal, Canada.
 - * Knox's Gelatin.
- Lipton's, New York, London.
 - (D) Lipton's Gelatin Jelly Tablets. (Flavors, except in the case of the vanilla and the Madeira rather flat. Amaranth and Naphthol Yellow S, permitted coal tar dyes used in all samples.)
- Merrell-Soule Company, Syracuse, N. Y.
 - * None Such Mince Meat.
- Minute Tapioca Company, Orange, Mass.
 - ★ Minute Gelatin. (Excessive claims as to solubility, absolute purity, etc., not warranted.)
 - * Minute Tapioca.
- National Starch Company, Corn Products Refining Company, New York, N. Y.
 - (N) Kingsford's Oswego Cornstarch. (Specifically misleading claim as to superiority to arrowroot; a good corn starch—nothing more.)
- Ovite Manufacturing Company, Orange, N. J.
 - (D) Ovite. (A mixture of corn starch and egg albumen with salt and colored with annato. Harmless but not "A nutritious product which displaces the whole egg in cooking," as claimed.)
 - (D) White Ovite. (White egg albumen and corn starch. One dollar a pound. Price excessive and not a legitimate substitute for the white of egg.)

- Plymouth Rock Gelatin Company, Boston, Mass.
 - ★ Plymouth Rock Plain, Granulated Gelatin.
 - (D) Plymouth Rock Phosphated Granulated Gelatin, A Compound. (Phosphoric acid objectionable; does not increase nutrition as claimed, and is not a satisfactory substitute for lemon.)
- Rich, E. C., New York, N. Y.
 - (N) Tryphosa—Lemon—Artificially colored. (Nearly 90 per cent. sugar and a permitted coal tar dye—not injurious but not a high grade product.)
- Whitman, Stephen F., and Son, Inc., Philadelphia, Pa.
 - (N) Whitman's Marshmallow Whip. (51 per cent. glucose, 26 per cent. sugar, balance water, gum and vanillin. Not a substitute for "whipped cream" in quality or nutritive value, but is correctly named, as it is of a typical marshmallow composition.)

IX

EXTRACTS

ITH practically no exceptions the flavoring extracts are guilty of exaggerated claims. Whether the Baker products are claiming to be "unequaled in strength," or the Burnett's are stated to be "so highly concentrated that only comparatively little need be used," or the McMonagle and Rogers' are said to be "extra strong," or the Yours Truly Company claims that their products are from "40 to 60 per cent. above the federal standard," one and all are drawing a very long bow. These are first-class products, but they merely comply with the federal standards or in some cases exceed the minimum requirements somewhat. Practically all of the vanilla extracts are said to be made from "the finest Mexican vanilla bean," just as huge amounts of coffees are labeled "Java and Mocha," regardless of the fact that the output of both is comparatively small. We have, therefore, partially disregarded these general and commonly exaggerated claims, though by no means approving them, in giving the star

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marking to extracts of standard quality, for the guidance of the buyer.

Flavoring extracts have long been notable sinners in regard to short volume. Often the bottles are made of thick glass and no particular content is claimed but the bottle which should hold two ounces, judging from size and price, holds much less. Under the new net weight law demanding that weights and measures be declared on all packages we might have corrected this evil had not the vicious provision, that a "reasonable variation" should be permitted, or small packages exempted, been inserted in the law. A deduction has in all cases been made where the output of any manufacturer showed a general tendency toward short weight.

The question most often asked in regard to extracts is, What are vanillin and coumarin? When they appear on the label what does this mean? Are such extracts harmful? The true vanilla extract made from the vanilla bean is much more delicate in flavor and more expensive than that made from the artificial vanillin obtained from oil of cloves. Coumarin is a substance obtained from the Tonka bean and is also a cheaper product of inferior flavoring quality used in imitations.

Neither can be said to be harmful, but such a product should be plainly labeled "imitation" or "artificial vanillin." It is not enough to label it "vanilla extract" and then give a list of ingredients which conveys no meaning to the average buyer. The true vanilla extract is derived only from the vanilla bean. We have excluded from the approved list all imitation extracts, though many are now honestly labeled, as required by the law. We consider all of the extracts made from artificial ethers in the laboratory, and nearly always colored with coal tar or vegetable dyes to conceal inferiority, as unworthy of a place in an approved list of high grade products. They are used in such small quantities that their harmfulness cannot be discussed, but they are not natural foods and in our estimation could not be classed among high grade products. The best makers are endeavoring to provide pure fruit extracts, even in the case of strawberry, raspberry and other flavors most difficult to make. Better do without an extract than use an imitation poorly flavored and artificially colored.

The new paste extracts are made of gum and glycerin with appropriate flavors. They are not injurious, but the extravagant claims made as to

superiority to alcoholic extracts cannot be maintained. They may be more economic for some purposes and their use is largely a matter of taste. Their inferior diffusibility is another objection and the vanilla and lemon extracts do not yield themselves to this treatment as well as other flavors, like ginger.

TESTED EXTRACTS

(Starred products (★) are rated at 85 to 100; (N) indicates a noncommittal rating between 76 and 84; disapproved products (D), rated at 75 and less; see Introduction and page xxviii for details as to method of rating.)

Baker Extract Company, Portland, Maine, and Spring-field, Mass.

- * Almond, Pure Extract.
- * Lemon, Pure Extract.
- ★ Onion, Pure Extract.
- * Orange, Pure Extract.
- * Pineapple, Pure Extract.
- (N) Pistachio, Imitation Flavor. (A harmless imitation extract properly labeled, compounded of vanilla extract, almond extract, glycerin, alcohol and a permitted coal tar dye. Not injurious but not star quality.)
- ★ Raspberry, Pure Extract.
- ★ Strawberry, Pure Extract.
- ★ Vanilla, Pure Extract. (Claim "unequaled in strength" an exaggeration.)

Burnett, Joseph, and Company, Boston, Mass.

- * Almond.
- (N) Banana, Imitation Flavor. (A mixture of amyl and ethyl acetate in alcohol, correctly labeled.)
 - * Cherry, Superior Extract.
 - ★ Lemon, Superior Extract.
- * Orange.
- (N) Peach, Imitation Flavor. (Essentially an essence of oil of bitter almonds, with a little orange flavor; not a true peach flavor.)
 - * Pineapple.
- (N) Pistachio, Imitation Flavor. (A mixture of almond, cinnamon and other oils.)
 - * Raspberry.
 - * Strawberry.
 - ★ Vanilla.
- ★ Wintergreen, Essence of. (Medicinal claim, which was criticised as objectionable, has been withdrawn.)

Christy, Arthur N., and Company, Newark, N. Y.

(D) Lemon Flavor. (A paste flavor consisting of gum and glycerin with too small an amount of oil of lemon to be determined. States on label that terpeneless oil of lemon is used with the true oil. The former is of very inferior quality. Claims to be "The standard of excellence," and is harmless but of poor quality and not comparable with the standard alcoholic extracts.)

Colburn, The A., Company, Philadelphia, Pa.

- * Almond.
- * Almond, May Flower Extract, Pure.
- * Lemon, May Flower Extract, Pure.
- ★ Orange May Flower Extract, Pure.
- * Orange.
- * Rose.
- * Rose, May Flower Brand, Extract of Pure.
- * Vanilla.

(The May Flower Brand represent standard goods, no more, and no extravagant claims are made on the label. The other products are also of good standard quality, but there is no foundation for the claim that they are "the standard goods of America," and "far superior to the standard required by law.")

Crescent Manufacturing Company, Seattle, Wash.

(D) Crescent Mapleine. (A harmless substitute product; consists essentially of burnt sugar (caramel) and vanillin. Misleading name, corrected by sublabel—"Contains no maple sugar, syrup nor sap but produces a taste similar to maple."

McCormick and Company, Baltimore, Md.

★ Almond, Bee Brand Highest Quality, Absolutely
Pure Extract. (Extreme quality claims and
slight short measure.)

- ★ Ginger, Bee Brand Highest Quality, Absolutely Pure Essence.
- ★ Lemon, Bee Brand Highest Quality, True.
- (D) Orange, Bee Brand Highest Quality Extract, True—Colored. (Below standard and artificially colored.)
- (N) Peach, Bee Brand Concentrated Flavoring, Imitation. (Does not "taste like fresh fruit"—poor quality.)
- (N) Pineapple, Bee Brand Concentrated Flavoring, Imitation. (Same.)
- (N) Rose, Bee Brand Concentrated Flavoring—Colored. (Harmless vegetable dye (cudbear) used.)
 - ★ Vanilla, Bee Brand Highest Quality, True Extract.

 (Quality claims exaggerated but products starred were standard.)

McMonagle and Rogers, Middletown, N. Y.

- * Almond, Premium Fruit Flavors.
- ★ Celery, Premium Fruit Flavors.
- * Cinnamon, Premium Fruit Flavors.
- ★ Cloves, Premium Fruit Flavors. (Above standard minimum strength but slightly short measure.)
- * Lemon, Premium Fruit Flavors.
- (N) Nutmeg, Premium Fruit Flavors. (Short measure and below standard strength.)
 - ★ Onion, Premium Fruit Flavors.
 - ★ Orange, Premium Fruit Flavors.
- * Peppermint, Premium Fruit Flavors.

- * Rose, Premium Fruit Flavors.
- * Vanilla, Premium Fruit Flavors.
- * Wintergreen, Premium Fruit Flavors.

Pitkin, J. M., and Company, Newark, N. Y.

- (N) Almond Flavor.
- (N) Ginger Flavor.

(Harmless and suitable for some purposes, but not superior to alcoholic extracts as claimed.)

- (N) Lemon Flavor. (Oil of lemon fortified with citral.)
- (D) Vanilla Substitute. (Contains vanillin, coumarin and caramel coloring, and it is claimed that it is superior to the pure standard article.)

Price Flavoring Extract Company, Chicago, Illinois.

★ Dr. Price's Delicious Flavoring Extract, Vanilla.

Sauer, C. F., Company, Richmond, Va.

- * Almond.
- (N) Banana, Imitation Flavor.
- * Orange.
- (N) Peach, Imitation Flavor.
- (N) Pineapple, Imitation Flavor.
- (N) Strawberry, Imitation Flavor.

 (Imitation flavors artificially colored. Made from blended ethers. Correctly labeled.)
 - ★ Vanilla, Pure concentrated extract. ("Absolute purity" claim objectionable; attack on substitutes as being "injurious" not warranted.)

Slade, D. and L., Company, Boston, Mass.

- ★ Almond, Absolutely Pure Extract. ("Absolutely pure" objectionable as always.)
- ★ Lemon, Absolutely Pure Extra Strong Extract.

 (Not "extra strong," just standard.)
- ★ Peppermint, Absolutely Pure Family Remedies.
- * Rose, Absolutely Pure Extract.

Stickney and Poor Spice Company, Boston, Mass.

★ Vanilla, Best U. S. P.

Yours Truly Company, Chicago, Illinois.

- ★ Lemon, Pure Extract.
- ★ Vanilla Extract, Yours Truly Pure Extract.

 (Good standard products not above official standards as claimed.)

FISH—(CANNED, DRIED, ETC.)

THE utmost care should be exercised in regard to the use of all canned fish, because when these products do decompose they have a tendency more than almost any other products, to develop poisonous bodies in the process of protein degradation. The housewife should always examine the can carefully by its appearance, smell, and taste upon opening. Great care, however, is exercised in putting up fish products and the salmon especially may be mentioned as retaining, to a marked degree, the quality of the fresh product.

All canned fish should be consumed immediately upon opening and not be kept over for the next day. Properly smoked and dried fish offer a most nutritious and economical diet and are much more widely used abroad than here. Their use could very profitably be extended, especially in view of the high price of meat.

TESTED FISH (CANNED, DRIED, ETC.)

(Starred products (★) are rated at 85 to 100; (N) indicates a noncommittal rating between 76 and 84; disapproved products

(D), rated at 75 and less; see Introduction and page xxviii for details as to method of rating.)

Als Hangesund Preserving Company, Hangesund.

★ Fancy Imported Norway Sardines in Mustard Sauce—Salome Brand. (Not a true sardine (pilchard); labeling permitted by official regulations.)

Beale and Garnett Company, Eastport, Maine.

★ Finnan Haddie. (Put up in the United States; a true Finnan Haddie should be from Scotland.)

Beardsley, J. W., Sons, New York, N. Y.

(N) Shredded Codfish. (No borax found; short weight and extravagant statement as to comparative nutritive value—1 lb. not equal to 4 lbs. of fresh fish, as stated.)

Burnham and Morrill Company, Portland, Maine.

★ Fish Flakes.

California Fish Company, Los Angeles, California.

(N) California Sardines. (True pilchard or sardine not found on California coast, labeling permitted by Government, but sublabel "Genuine sardines" objectionable.)

Cresca Company, Distributors, 355 Greenwich Street, New York.

* Caviar Superieure.

Crosse and Blackwell, London.

(N) Anchovy Paste. (Colored with an unidentified reddish dye. Labeled "Artificially colored.")

Davis, Frank E., Company, Gloucester, Mass.

- * Deviled Crab Meat.
- ★ Lump Crab Meat.
- (D) Crab Shells. (Not perfectly cleaned.)
- * Fish Flake.
- * Fish Flake, Codfish and Haddock Corned.
- * Kippered Herring.
- * Fresh Mackerel.
- (D) Selected Gulf Fresh Shrimp. (Quality poor; two samples out of four bad.)

Emery and Company, Boston, Mass.

(N) Deviled Sardines. (Sublabeled "Atlantic Ocean Sardine Herrings," really are herrings; not a "most economical and nutritious article of food," as claimed.)

Gorman and Company, Inc., Seattle, Wash.

(D) Red Heart Brand Alaska Salmon. (Slack fill and short weight; a low grade article.)

Gorton Pew Fisheries Company.

★ Gorton's Boneless Codfish. (19 per cent. of salt.)

Liss, George, and Company, New York City.

★ Salmon, Highwood Brand, Columbia River.

Lord Brothers Company, Portland, Maine.

* Extra Quality Pure Codfish Strictly Boneless.

McMenamin and Company, Hampton, Va.

* Crab Meat.

- Peabody, Henry W., San Francisco, California and New York.
 - * Havalan Brand Japanese Crab Meat.
- Sea Beach Packing Works, Aberdeen, Wash.
 - * Pioneer Minced Sea Clams.
- Southern California Fish Company, Los Angeles, Cal.
 - * Blue Sea Tuna.
- Van-Thomas Company, Los Angeles, Cal.
 - ★ Avalon Brand Tuna. (Packed in cottonseed and olive oil and so labeled.)
- Watson, Angus, and Company, Newcastle-on-Tyne, England.
 - (N) Skipper Sardines in Tomato.
 - (N) Skipper Sardines in Virgin Olive Oil.
 - (Not true sardines (pilchards)—Norway bristlings and should be so labeled. Government permits designation "Norway sardines," but in this case labeling is not even true to this ruling.)
 - * Bouillon Herringlets.
- Williams, R. C., and Company, New York.
 - * Salmon, Royal Scarlet, Columbia River.

XI

FRUITS-DRIED 1

THE points in regard to dried fruits are: Are they unsulphured? Are they free from excessive moisture (which sulphuring makes possible)? Are they free from insect infection? Have full weight and measure been given? For the starred products we can answer "yes," in regard to all of these points. Fruits are transported more cheaply in this dried compact form and the consumer pays for less water than in fresh or canned goods. Their keeping qualities are also excellent and they form a very acceptable part of the diet both from an economical and nutritive point of view, especially during the seasons when fresh fruits are unavailable or very high in price. Stewed dried fruits are excellent natural laxatives as well as nutritious and a handful of raisins, dates or figs is much better, in my opinion, for the growing child than candy.

¹ For canned fruits see page 45.

TESTED FRUITS, DRIED

(Starred products (*) are rated at 85 to 100; (N) indicates a noncommittal rating between 76 and 84; disapproved products (D), rated at 75 and less; see Introduction and page xxviii for details as to method of rating.)

- American Dehydrating Company, Waukesha, Wisconsin.
 - (N) Dehydro-Fresh Cranberries. (By no means equal to fresh fruit nor superior to the dried and evaporated goods, as claimed.)
- American Vineyard Company, Fresno, Cal.—Boston—San Francisco.
 - ★ Ideal "Not-a-Seed" Raisins.
- Austin-Nichols and Company, New York, N. Y.
 - (D) Peaches, Fancy Evaporated California. (0.15 per cent. of sulphur found in this product. Label read "sulphur bleached"; considered injurious to health though permitted by federal regulation pending investigation.)
- California Fruit Canners' Association, Fresno, Cali-
 - * Del Monte Brand California Seedless Raisins.
- Carque Pure Food Company, Los Angeles, Cal.
 - * Apricots, Carque's California Likefresh Fruits.
 - * Bananas, Carque's California Likefresh Fruits.
 - ★ Cherries, Carque's California Likefresh Fruits.
 - * Figs, California Selected Black Mission.
 - * Olives, Selected Sun Dried California Ripe, Dry.

- ★ Peaches, Carque's California Likefresh Fruits.
- ★ Pears, Carque's California Likefresh Fruits.

 (Claims somewhat overdrawn; excellent unsulphured products.)

Cresca Company, New York, N. Y.

- * Cresca Figs.
- * Stuffed Figs and Stuffed Dates.
- * Cresca Choicest Cluster Raisins.

(Figs and dates are "Prepared with corn syrup," i. e., glucose; declared on label, amount very small but unnecessary and undesirable.)

DeGroff, Lewis, and Son, New York, N. Y.

* Smyrna Figs, Health Brand.

Fresno Home Packing Company, Fresno, California.

★ Fancy Cluster Raisins, Blue Ribbon Brand.

Greenhut Siegel Cooper Company, New York, N. Y.

★ Raisins, Sultanas, Golden West Brand, Extra Quality, Natural, Seedless.

Higgins, William A., and Company, New York, N. Y.

- (N) Chariot Apples. (Minute trace of sulphur; short weight due probably to drying out.)
- (D) Seedless Raisins, Berry Brand. (Short weight, 0.018 per cent. sulphur dioxide.)

Hills Brothers Company, New York, N. Y.

- ★ Dromedary Brand Cleaned Currants.
- ★ Dromedary Golden Dates.

★ Dromedary Brand Washed Figs. ("Conserved in corn syrup," i. e., glucose—declared on label—very small amount present but is undesirable and unnecessary.)

Koenig and Schuster, New York.

* Fancy Malaga Raisins, Princess Brand.

Seaman Brothers, New York, N. Y.

* White Rose California Seeded Muscatel Raisins.

Williams, R. C., and Company, New York, N. Y.

* Royal Scarlet Seeded Raisins.

XII

HOUSEHOLD REMEDIES AND DISIN-FECTANTS*

THE miscellaneous samples reported under this heading pretend in no way to cover the field, but were examined mainly in response to inquiries and as information was needed. Vaselines (petrolatum) are standard products, but the "remedial" claims made for them have been exaggerated. The disinfectants all err in making extravagant claims, extending their usefulness into the medicinal field and so becoming dangerous in the hands of the layman. The non-poisonous claim is particularly misleading and the fanciful names under which these products are presented are objectionable in that they conceal the true nature of the disinfectant which might easily be declared. A standardized, carefully prepared disinfectant of proper strength is a boon to the housekeeper and it is a great pity that these products cannot be sold in a more intelligent and ethical way as they are undoubtedly useful, and their quality

^{*} Data do not represent complete analyses; only important and characteristic ingredients are mentioned.

in many cases is excellent. Some of the materials reported fall within the patent medicine class and exhibit all the evils and misleading statements typical of such products.

TESTED HOUSEHOLD REMEDIES AND DIS-INFECTANTS

(Starred products (★) are rated at 85 to 100; (N) indicates a noncommittal rating between 76 and 84; disapproved products (D), rated at 75 and less; see Introduction and page xxviii for details as to method of rating.)

American Druggists Syndicate, Long Island City, N. Y.

(N) A. D. S. Foot Tablets. (An astringent antiseptic wash containing tannin, salicylic acid, alum, boric acid, etc. Claims that it is a "valuable remedy," "effective in the treatment of bunions," etc., are extravagant.)

Bauer and Black, Chicago, Ill.

(N) Blue Jay Corn Plasters. (Contain salicylic acid, which is practically always the active ingredient of corn salves. Is often helpful but the claim "In 48 hours corn comes out root and all," is exaggerated.)

Bauer and Company, Berlin, A. Wulfing and Company, N. Y. American Agents.

(D) Formamint Tablets. (A formaldehyde preparation with extravagant claims as to its therapeutic and germicidal properties. Efficacy of the tablets is believed to be much overrated, in addition to which they might be irritating in some conditions.)

Bliss, Alonzo O., Company, Washington, D. C.

(D) Native Herbs. (A mixture of aloes, the common cathartic, and cassia, with probably small amounts of podophyllum, ginger, dandelion, and other stomachics. Not true to name, and accompanied by characteristic patent medicine claims, which are obviously impossible of fulfillment. Would not "cure rheumatism, catarrh, nervous disorders, diabetes and all syphilitic diseases" as claimed.)

Carter Lytle Drug Company, Baltimore, Md.

(N) Kornol. (Collodion with salicylic acid in alcohol and ether. "It will dissolve the most obstinate cases." "The best paint for corns," etc. Claims excessive.)

Chesebrough Manufacturing Company, New York, N. Y.

- (N) Capsicum Vaseline. (Petrolatum containing capsicum. A good product but only palliative, not "a remedy" for rheumatism, gout, neuralgia, etc., as stated. Not "superior to mustard or any other plaster" under all conditions.)
 - ★ Carbolated Vaseline. (A petrolatum containing phenol. Statements that it is "A valuable antiseptic dressing for wounds, etc.," is true.)

- ★ Mentholated Vaseline. (A mentholated petrolatum, which may be advantageously used for "nervous headaches, sore throat, neuralgia, neuritis, rheumatism, etc.," as a palliative. No remedial or curative properties claimed in this case.)
- ★ Vaseline. (Former claims 'an invaluable remedy for burns, rheumatism, hemorrhoids' withdrawn from label; product is palliative but hardly remedial in such cases.)
- ★ White Vaseline. (Pure petrolatum; former claim that it is an "invaluable family remedy for rheumatism, catarrh, hay fever, etc.," is obviously an exaggeration, as "remedy" implies constructive healing while this substance is only palliative. Claims withdrawn from label.)

Clark's Corporation, New York, N. Y.

(D) Sel Amaigrissant. (Merely crystallized washing soda, perfumed. Claims made as to its merits as a flesh reducer when used in the bath, are manifestly absurd, and the price is high.)

Crittenton, Charles N., Company, New York, N. Y.

(D) Tooth Ache Drops, Pike's Universal Vegetable.

(Consists chiefly of chloroform and alcohol with a little oil of cloves and other antiseptic oils; not a "vegetable" product; chloroform dangerous and habit forming, and tends to defer necessary dental attention.)

Dodge, Walter Luther, and Company, Chicago, Ill.

(N) Tiz. (Tablets containing tannin, salicylic acid, alum, and orris root. An astringent antiseptic foot bath, harmless but could do but little for bunions, ingrowing nails, etc., as claimed.)

Downs, Jean, 334 Fifth Avenue, New York City.

(D) Get Slim. (Consists essentially of sugar and tartaric and citric acids, colored with a trace of pink dye. Claims for its efficiency as a flesh reducer grossly exaggerated and an unlimited use of these acids might be harmful.)

E. C. D. Chemical Company, 1777 Broadway, New York City, N. Y.

(D) Fluid En-Ser-Ol. (An alleged catarrh and deafness cure, consists essentially of camphor, glycerine, water and traces of antiseptics. Worth about 2 cents and sells for \$1; claims absurd.)

Every Woman Company, Chicago, Ill.

(D) Every Woman's Flesh Reducer. (A mixture of epsom salts, alum, washing soda and camphor, 5 tablespoonfuls to be used in a hot bath as a flesh reducer; claims absurd. Sells for 89 cents, costs not more than 10, at a liberal estimate.)

Evans Sons, Lescher and Webb, Ltd., Liverpool, London and New York.

(N) Antiseptic Throat Pastilles. (Consists essentially of gum acacia, licorice, terpin-hydrate, and ammonium salt; claims slightly exagger-

ated. It would restore the voice and make breathing easy when there was some slight difficulty only.)

- Giant Chemical Company, Philadelphia, Pa.
 - (N) A-Corn Salve. (Contains fat, salicylic acid, methyl salicylate. Claims moderate, except that it could hardly remove bunions.)
- Grape Capsule Company, 108 Fulton Street, New York, N. Y.
 - (N) Cod Liver Oil Capsules. (A good cod liver oil in capsule form, but is short weight and high priced considering the amount of oil obtained, due allowance being made for the expense of the capsule form; claims are conservative.)
 - (N) Olive Oil Grapes. (Olive oil in capsule form, excessive claims as to its value as a "tissue builder and flesh creator," as "an appetizer," etc.)
 - ★ Ricinol Grape. (Castor oil.) (A good castor oil in capsule form. Slightly short weight but 2½ grams for ten cents is not excessive.)
- Grove, E. W. (Paris Medicine Co., St. Louis, Mo.).
 - (D) Laxative Bromo-Quinine. (Contains aloin, as a laxative, bromid and phenacetin (2 grains per tablet), belladonna and quinine. A most undesirable product for miscellaneous uncontrolled ingestion.)
- Hydrox-Chemical Company, New York, Chicago, San Francisco.
 - (N) Hydrox Hydrogen Peroxide. (Contains acet-

anilid as a preservative. Extravagant claims as to efficacy as a mouth wash.)

Jad Salts Company, New York, N. Y.

(D) Jad Brand Salts. (A shot-gun prescription which "cures" too many diseases at once. Consists principally of sodium phosphate, sodium and potassium bicarbonates and citric and tartaric acids, and a very small amount of hexamethylene tetramine, antiseptic diuretic, as stated on the label. Odor of formaldehyde showed partial decomposition of last named ingredient. Miscellaneous drugging of this kind is useless and often attended by an element of danger. 75 cents is an exorbitant price for four ounces of this material.)

Kimball, Lucile, 1327 So. Michigan Boulevard, Chicago, Ill.

(D) Obesity Remedy. (Consists of 1. A powder made up of soap, epsom salts and washing soda, for external application. 2. Brown tablets consisting essentially of aloin a laxative, belladonna and nux vomica. 3. Pink tablets to furnish a tonic and stomachic, consisting essentially of capsicum, menthol, and bitter principles resembling those from quassia and gentian; harmless in general, but utterly unable to fulfill the excessive claims made for it as a flesh reducer.)

Kinox Company, Rutland, Vermont.

(N) Kinox. (Essentially the product known as Chinosol, a derivative of quinolin. A good antiseptic sold under a fancy name with extravagant claims for its application.)

Landshut, Karl, Chicago, Ill.

(D) Louisenbad Reduction Salt. (Essentially epsom salts, worth about 2 cents a pound and sold for one dollar. That it would prove a "remedy for obesity without the use of drugs, diet, exercises," by using it in the bath water, is obviously absurd, neither would it "tone the whole body.")

Lambert Pharmacal Company, St. Louis, Mo.

* Listerine.

Lehn and Fink, New York City.

★ Lysol. (A solution of cresylic acid with a germicidal value about twice that of carbolic; name objectionable, as not being descriptive of the product, which, however, is an excellent one.

Very similar to the "Liquor cresolis compositus" of the Pharmacopoeia.)

Luden, W. H., Reading, Pa.

★ Menthol Cough Drops. (A simple menthol cough drop, for which no extravagant medicinal claims are made. Efficacy of all cough drops is of course very limited.)

Martindale, Thomas, and Company, Philadelphia, Pa.

(D) Royal Olvules. (A first-class olive oil in capsule form. Disapproved because of the fact that only two or three ounces are given for \$1 and the claims as to its being a specific for constipation and a preventative for appendicitis, are manifestly misleading. A useful and unobjectionable product if properly priced and presented.)

Medical Formula Company, Chicago, Ill.

(D) Calocide Compound. (A foot bath consisting of alum, salt and gallic acid. Might be very drawing and drying to the feet, undesirably so under some conditions.)

Mentholatum Company, Buffalo, New York.

(D) Mentholatum. (A useful mixture of camphor, menthol, vaseline and boric acid, but the statement that it will give even "quick relief" for hay fever, pneumonia, croup, neuralgia, rheumatism, etc., must be considered decidedly misleading.)

Merck and Company, New York, N. Y.

★ Creolin-Pearson. (An efficient disinfectant; former dangerous claim of "non-poisonous," and excessive claims as to strength withdrawn; applications and efficiency claims still somewhat too broad.)

Möller, Peter, London (Schieffelin and Company, U. S. Agents, New York).

* Hydroxyl-Free Cod Liver Oil. (A very pure, high

quality cod liver oil. The claim made that it is hydroxyl-free appears to be questionable and claims as to its being a "perfect food," "a universal remedy," etc., are deprecated as meaningless exaggeration.)

Moras, Dr. E. R., Highland Park, Illinois.

- (D) Detoxyl. (A tablet consisting essentially of epsom salts with citric and tartaric acids in combination with soda. Said to cure practically all known diseases from pneumonia to whooping cough, including typhoid fever and delirium tremens, when used in connection with the dietetic and hygienic system outlined in the literature. The claims are obviously impossible of fulfillment. See article in "Good Housekeeping, April, 1914.)
- (D) Eye Cream. (A mixture of cocoa butter and lanolin, or some similar fat. No medication whatever could be found, not even boric acid. A small salve box of this is sold for \$2. It is claimed that all eye troubles can be cured by massaging the eyelids with it. Pretensions obviously misleading and impossible of fulfillment.)

Musterole Company, Inc., Cleveland, Ohio.

(D) Musterole. (A good mustard and menthol preparation, probably non-blistering as claimed, but the statements that it would prevent pneumonia, and that there is "nothing like it" for

rheumatism, pleurisy, tonsilitis, etc., are misleading.)

New Skin Company, 98 Grand Avenue, Brooklyn, N. Y.

★ New Skin. (Essentially a flexible collodion with amyl acetate; has also antiseptic properties but "germ-killing" powers are somewhat problematic.)

Nikola Chemical Company, 449 W. 52nd St., New York, N. Y.

(D) Nikola Bathing Compound and Weight Reducer.

(Essentially washing soda with a little salt.

The claim that it is "Recommended by leading physicians here and abroad as a weight reducer and a preventative of gout, rheumatism, kidney trouble, and all forms of skin diseases" is palpably misleading.)

Oakland Chemical Company, New York, N. Y.

★ Dioxogen.

Olmsted, Allen S., New York, N. Y.

(N) Allen's Foot Ease. (Essentially talc and boric acid. Any good borated talcum powder would be equally efficacious in relieving and preventing blisters, etc. Could do nothing curative for "ingrowing nails and bunions.")

Pond's Extract Company, New York, N. Y.

(N) Pond's Extract. (Distilled extract of witch hazel; slightly exaggerated claims, though it is not described as a remedy, but only for use in earache, boils, toothache, neuralgia, sore eyes,

etc; claim that "nothing else is so healing to the skin" is exaggerated.)

Potter Drug and Chemical Company, Boston, Mass.

- (D) Cuticura Ointment. (A vaseline and wax preparation, perfumed, depending essentially on the small amount of phenol present for its antiseptic value. Claims for its efficacy in treating humors, ulcers, eczema, etc., greatly overstated.)
- Pure Gluten Food Company, 90 West Broadway, New York, N. Y.
 - (N) Hoyt's "Sweetina." (A preparation of saccharin for the use of diabetics. Legitimate product if plainly named.)

Rueckheim Brothers and Eckstein, Chicago, Ill.

- (N) Angelus Cough Drops. (A horehound cough drop, flavored with sassafras and containing no drugs. 25 per cent. of glucose and 64 per cent. of sucrose. Statement that it is highly recommended for sore throat, is a slight exaggeration.)
- Sam Katz Company, 1325 South Michigan Avenue, Chicago, Ill.
 - (D) Sam Katz Oxygen Treatment for Catarrh.

 (This treatment consists of four parts: (1)

 A so-called oxygen germicide, consisting of sodium perborate flavored with cinnamon. (2)

 Plumose fiber, which is absorbent cotton

heavily impregnated with aromatic substances, methyl salicylate, menthol, etc., and (3) two sets of tablets one of which generates oxygen on treatment with acid. Product might have some disinfecting power but is entirely unable to fulfill the claims made for it as a catarrh cure and the claims based on the liberation of oxygen in the stomach and intestines are unscientific and unwarranted.)

Sargol Company, Binghamton, N. Y.

(D) Sargol. (The report of the British Medical Association on Sargol is recorded in the "Journal of the American Medical Association" as follows:

Sugar	.18.0	per	cent.
Insoluble protein	.10.8	66	66
Sodium and potassium			
hypophosphites	. 7.7	66	66
Albumin (soluble)	. 4.2	66	66
Lecithin	. 1.9	66	66
Zinc phosphid	. 0.7	66	66
Talc, Kaolin, moisture, etc.			

(The composition of such products varies from time to time and manifestly while such a combination might have some little tonic value, its effect would be problematic, and the claims made for it as a flesh builder, and the statement that "any man or woman can now be plump and well developed," or that it "makes

puny, peevish people plump and popular" are very absurd. Eggs, milk and grains are a better source of phosphorus and lecithins. Great tonic value of hypophosphites is an exploded notion. It was estimated that 30 of these tablets, which sold for \$1, had an intrinsic value of $2\frac{1}{2}$ cents.)

Spencer Kellogg and Sons, Buffalo, N. Y.

★ Tasteless Castor Oil. (Practically tasteless and claims for its efficiency only slightly exaggerated.)

Stearns, Frederick and Co., Detroit, Mich.

(D) Headache Cure. (Shac.) (A typical headache remedy containing in each wafer one-half grain of caffein and 4 grains of acetanilid, the latter being a dangerous and heart depressant drug which has no remedial value but merely reduces the susceptibility to pain.)

Sterizol Sales Company, Boston, Mass.

(D) Sterizol, The Perfect Antiseptic. (An antiseptic mixture of sodium chlorid and borax, with a small amount of menthol and thymol. Sold for \$1 a package and recommended for practically every known ill. Claims for its efficiency and superiority are entirely unwarranted. Charge is excessive.)

Sulpho-Napthol Company, Boston, Mass.

(N) Sulpho-Napthol. (A very good coal tar preparation having from 2.3 to 3.8 times the efficiency of carbolic acid, but the extravagant medicinal and curative claims might prove misleading to the layman.)

- West Disinfecting Company, New York, N. Y.
 - ★ C. N. Disinfectant. (A very excellent phenol, cresol, coal tar disinfectant in concentrated soap solution; germicidal value nearly six times that of phenol but the claims, while much moderated are still slightly broad.)
- Woolheal Chemical Company, 149-151 Church street, New York, N. Y.
 - (D) Wool Heal. (A partially purified wool grease, inferior to the U. S. P. lanolin. Extravagant claims made that it will afford immediate relief in the most distressing forms of pimples, and all flesh and skin blemishes.)

XIII

LARD, BUTTERS, AND THEIR SUB-STITUTES

I T is quite impossible to certify without sanitary inspection to the materials from which lard and butter have been made, but careful chemical tests were made of these products to determine whether or not they complied with the standards as to the amount of moisture and the quality and quantity of the fat present, and were free from artificial color or preservatives. Over and over we are asked, "Is oleomargarine wholesome?" and "What is Crisco?" Oleomargarine may digest somewhat more slowly than butter but this does not prove that it is less nutritious. There is no reason why it should not be an acceptable food if honestly sold at a lower price than the more delicious, but no more wholesome, butter. This is assuming that the oleomargarine is made in a cleanly way from pure neutral lard, beef fat, or vegetable oils, with or without the admixture of cream or butter.

Crisco, the much advertised cooking fat, is made from cotton seed oil by a special process which solidifies it. There are no scientific data as to its

relative digestibility, but as far as we know it is a perfectly wholesome and efficient substitute for cooking butter and lard. Claims made as to its taking the place of butter in cake making and the superiority of foods that are cooked in it, open up a debatable field to put it mildly. Cooks will doubtless disagree on these points. It is said to be richer than butter because it contains less water and therefore, has relatively more fat in a given bulk. To this extent it is more economical. The question of flavoring and consistency, however, would enter into cake making and it is questionable whether it takes the place of butter for such uses; as a frying medium, it undoubtedly has certain physical properties which are advantageous.

The peanut butters so extensively used now, especially for children, are included in this section. These products offer in concentrated form a ration very high in two of the principal food elements. All of the products approved contained 45 per cent. or more of fat, about 29 per cent. of protein, and approximately 22 per cent. of carbohydrates. These are plainly rich, highly nutritious foods to be eaten in small quantities, rather than perfectly balanced foods for a general diet as they are sometimes claimed to be.

TESTED LARD, BUTTERS AND THEIR SUBSTITUTES

(Starred products (*) are rated at 85 to 100; (N) indicates a noncommittal rating between 76 and 84; disapproved products (D), rated at 75 and less; see Introduction and page xxviii for details as to method of rating.)

Ammon and Pearson, Jersey City, N. J.

★ Oleomargarine, Baby Brand. (A properly labeled and acceptable oleomargarine, uncolored. Has no right to appellation "Creamery Butterine," which is sometimes used and is misleading.)

Armour and Company, Chicago, Ill.

* Armour's "Simon Pure" Leaf Lard.

Beechnut Packing Company, Canajoharie, N. Y.

* Beechnut Brand Peanut Butter.

Bosman and Lohman Company, Norfolk, Va.

* Nut-Let Peanut Butter.

Carque Pure Food Company, Los Angeles, California.

★ Carque's Nut Cream Butter. (Ground nuts with cocoanut; somewhat extravagant nutritive claims.)

Forest Home Farm, Purcellville, Md.

* Lard.

Fairbank, N. K., Company, Chicago and New York.

★ Cottolene. (Cotton seed oil and beef stearin, uncolored.) Fox River Butter Company.

★ Pure Butter. ("Absolutely Pure" claim objectionable, as always. An excellent product, however, with very low moisture content, showing careful preparation.)

Heinz, H. J., Company, Pittsburgh, Pa.

* Peanut Butter.

Hills Brothers Company, New York, N. Y.

* Datenut Butter.

Jones Dairy Farm, Fort Atkinson, Wisconsin.

* Pure Lard.

Morehouse Mills, Chicago, and Los Angeles.

★ Mrs. Morehouse's Peanut Butter.

Morris and Company, Chicago, Ill.

* Marigold Oleomargarine.

Proctor and Gamble Company, Cincinnati, Ohio.

* Crisco. (Cottonseed oil solidified by a special process.)

Swift and Company, Chicago.

- (N) Silver-Leaf Brand Lard. (Of good quality but does not comply with requirements for a "leaf" lard, use of the words "Silver-Leaf Brand" considered misleading. Five pound pail at 70 cents weighed four pounds. No weight declared.)
 - * Swift's Premium Oleomargarine.
- * Swift's Jersey Brand Oleomargarine.

Yours Truly Company, Chicago, Ill.

* Yours Truly Peanut Butter.

XIV

MEATS—(CANNED, DRIED, ETC.)

In many of the dried meats potassium nitrate (saltpetre) is present in small amounts. It is not needed to preserve these products but is used solely to give the reddish color of fresh meat to the smoked or dried meat. Its use has never been forbidden by official ruling, and only very small amounts are found, but the purpose for which it is used is clearly misleading, and since nitrate of potassium is rarely employed at present, even for therapeutic purposes, because it is inferior to the harmless vegetable potassium salts, and next to the cyanid and chlorate of potassium salts is considered the most poisonous of this class of bodies, it seems to me obvious that its use in a food product is undesirable, no matter how small the quantities may be.

TESTED MEATS AND MEAT PRODUCTS, (CANNED, DRIED, ETC.)

(Starred products (★) are rated at 85 to 100; (N) indicates a noncommittal rating between 76 and 84; disapproved products (D), rated at 75 and less; see Introduction and page xxviii for details as to method of rating.)

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Armour and Company, Chicago, Ill.

(N) Sliced Dried Beef. (Short weight and a trace of saltpetre present.)

Beech-Nut Packing Company, Canajoharie, N. Y.

* Beech-Nut Brand Sliced Beef.

* Beech-Nut Brand Sliced Bacon.

Cresca Company, New York, N. Y.

★ Paté de Foies Gras Aux Truffes du Perigord Strasbourg (Alsace) Germany.

Derby, H. C., Company, New York, N. Y.

★ Derby Brand Lambs Tongues.

Ferris, F. A. and Company.

* Our Trade Mark Ham.

* Boneless Bacon.

Forest Home Farm, Purcellville, Virginia.

★ Scrapple (unlabeled).

* Sausage.

* Virginia Ham.

Frank, L., and Son, Milwaukee, Wisconsin. (Bought of C. Jevne and Company, 32 South Wabash Avenue, Chicago, Ill.)

* Lax Ham.

* Liver Sausage.

* Summer Sausage.

Grand View Farm Produce Company, Lancaster, Pa.

* Pork Sausage.

Gordon and Dilworth, New York City.

★ Calves Foot and Head Jelly.

MEATS (CANNED, DRIED, ETC.) 151

Hormel, G. A. and Company, Austin, Minn.

- * Dairy Brand Bacon.
- * Dairy Brand Ham.

Houston Packing Company, Houston, Texas.

- (N) Cooked Whole Ox Tongue—Red Cross Brand. (Small amount of saltpetre present.)
- (N) Cooked Compressed Corned Beef—Red Cross Brand. (Small amount of saltpetre present.)

Jones Dairy Farm, Fort Atkinson, Wis.

- * Bacon.
- ★ Ham.
- * Little Sausage.

Libby, McNeill and Libby, Chicago, Ill.

- (N) Wafer Sliced Dried Beef. (Small amount of saltpetre present.)
- (N) Potted Meat, Beef Ham Flavor. (A compound honestly labeled but not of high quality.)
 - * Boneless Chicken.
 - * Deviled Ham.
- (N) Veal Loaf with Pork and Beef Product. (A miscellaneous mixture not of high quality.)

Pond, E. K. Packing Company, Chicago, Ill.

(N) Derby Brand Boneless Chicken. (Coarse, stringy, not high quality, probably old fowls.)

Richardson and Robbins, Dover, Delaware.

- * Boned Chicken.
- * Potted Ham.

Swift and Company, U. S. A.

- (N) Premium Ham.
- (N) Premium Bacon Sliced.

(Small amount of saltpetre present, good quality otherwise.)

Underwood, W. M., Company, Boston, Mass.

★ Original Deviled Ham.

XV

OLIVE OILS, ETC.

THE olive oils examined uphold the opinion that under the law this product as imported is no longer adulterated to any extent. Nearly all the samples complied with the standards. Occasionally, some dealer mixes cottonseed oil with olive oil after it is received in this country, as the difference in price makes the adulteration a most profitable one. The cotton seed oil, however, is, as far as we know, just as nutritious and wholesome as the olive oil, but merely has less flavor, is less delicious and should be properly sold under its own name and at a lower price.

Careful organoleptic tests were made of six of the olive oils examined, which all complied with the standards as far as chemical analysis could determine, to see whether any difference in quality could be detected by an unprejudiced jury. The three imported oils included in the test, namely, Artaud, Barton and Guestier, and the Lucca oil of S. Rae and Company, were plainly of deep color, and rich, characteristic flavor and odor. The Pompeian Oil was paler in color and blander, the flavor and odor not being so marked; while the Heinz oil was unanimously considered to have the mildest flavor and odor, and the palest color; one juror, however, preferred it on this account. This seems to establish the point that personal taste enters too largely into these fine distinctions of quality to afford any basis for discrimination and all of the oils starred are at least pure olive oils complying with the standards.

All edible oils are easily digested and furnish heat and energy with small effort on the part of the body. They spare the carbohydrates and so indirectly may be fattening; besides their nutritive value and easy digestibility, they serve as a mild, natural laxative.

TESTED OLIVE OILS, ETC.

(Starred products (*) are rated at 85 to 100; (N) indicates a noncommittal rating between 76 and 84; disapproved products (D), rated at 75 and less; see Introduction and page xxviii for details as to method of rating.)

Acker, Merrall and Condit Company, New York City.

★ Olive Oil.

Artaud, J. B., and A. Frères, Marseilles, France.

** Pure Olive Oil.

Barton and Guestier, Bordeaux, France.

Calvet and Company, Water Street, New York, N. Y.

* Huile d'Olive.

Campbell Company, Boston, Mass.

(D) Campbell's Kooking Oil. (Chiefly a cottonseed oil with some olive oil and possibly a little corn oil. Extravagant claims as to being a blend of fruit and vegetable oils, producing a product more healthy than lard or butter. Claims not to compete with cottonseed oil when it is largely cottonseed.)

Castle, The W. A., Company, Springfield, Mass.

* Cream Olive Oil.

Chiris, Antoine, Grasse, France.

★ Huile d'Olive, Surfine, U. S. P.

Heinz, H. J., Company, Pittsburgh, Pa.

★ Pure Olive Oil, Imported. (A bland light oil, authentic but not as rich in color and flavor as the other starred products.)

Libby, McNeill and Libby, Chicago, Ill.

* Olive Oil, Pure, Imported.

Maspero, C., Inc., (Packers)-Lucca, Italy.

(N) Lucca Olive Oil, Extra Fine. (Short measure and slightly below standard requirements in some particulars, though no adulterants could be identified.)

Mentoni Company, The, New York, N. Y.

(N) Italian Olive Oil, Rudelco Brand. (Good quality, but short weight.)

Pompeian Company, Washington, D. C.

★ Olive Oil, Pompeian Brand. (Good, but not quite so rich in flavor as some other brands.)

Rae, S., and Company, Leghorn.

* Lucca Oil, Finest Sublime.

Southern Cotton Oil Company, 24 Broad Street, New York, N. Y.

★ Wesson Snowdrift Oil. (A good cottonseed oil properly labeled.)

XVI

PRESERVES, PICKLES, ETC.

RESERVES, jams, and jellies are much more liable to be compounded and adulterated than are the canned goods which depend simply upon sterilization for their preservation and are not mixtures. The housekeeper should read the label on all preserves very carefully. Artificial coloring and chemical preservatives, glucose, instead of sugar, the use of more sugar than fruit, giving a characterless product, and the mixing of fruit residues with apple are all faults to be looked out for with this class of products. Fruits that have already done service in making jelly may be used again in preserves and some times phosphoric acid and citric acid are added to make up for the lacking flavor of the fresh fruit. Careful label reading will go far to protect the housewife on these points.

While, of course, entirely wholesome products may be made by using apples or apple juice for the foundation and merely flavoring it with other fruits, these are not of high quality and if they consist principally of apple juice they should be

labeled apple jelly or jam, flavored with raspberry, or strawberry. They have no right to the title "raspberry jam" when they consist principally of apple, a much cheaper fruit. Whenever the word "compound" appears upon the label it is a signal of distress. These compounds uniformly contain cheaper ingredients than the straight product which they are intended to replace. In other words, the term is usually a synonym for adulteration. Compound preserves, as a rule, consist largely of glucose and derive what little fruit flavor they have from apple and the residues of other fruits. Compounding is simply cheapening a product with a view to deception and the preserve and jam should represent the pure type of its respective kind, if quality is to be attained.

Alum, a substance of very dubious healthfulness, sometimes used to give crispness, and copper sulphate to give a vivid green color, are to be avoided in pickles. All of the products certified in this list contain a due amount of the fresh fruit from which the product is named, give fair weight and are free from glucose, preservatives, and added color. Reading the label carefully is almost a sure protection on these points.

TESTED PRESERVES, PICKLES, ETC.

(Starred products (★) are rated at 85 to 100; (N) indicates a noncommittal rating between 76 and 84; disapproved products (D), rated at 75 and less; see Introduction and page xxviii for details as to method of rating.)

Acker, Merrall and Condit Company, New York City.

- ★ Currant Jelly, Black.
- * Currant Jelly, Red.

American Fruit Product Company, Rochester, N. Y.

(N) Clarendon Brand Blackberry and Apple Pure Jam. (No distinctive flavor, probably should be labeled "Apple and Blackberry." No glucose present; a cheap, harmless product but not of "star" quality.)

Austin-Nichols and Company, New York, N. Y.

- ★ Red Raspberry Preserves.
- * Preserved Damsons.

Beech-Nut Packing Company, Canajoharie, N. Y.

- * Currant Jelly.
- ★ Grape, Concord, Jam.
- * Grape Fruit Marmalade.
- ★ Quince Jelly.
- * Strawberry Jam.

Cresca Company, New York City.

- (N) Pistachios. (13 per cent. of glucose was present in the syrup in which these nuts were packed; should have been declared on the label.)
- ★ Rose Leaves. (A jam.)

Crosse and Blackwell, London, England.

- * Apricot, Fresh Fruit Jam.
- * Chow Chow.
- * Gooseberry, Fresh Fruit Jam.
- * Marmalade, Pure Orange.
- * Mixed Pickle.
- * Strawberry, Fresh Fruit Jam.

Cruikshanks Brothers Company, Pittsburgh, Pa.

(N) Apple and Currant Jelly. (No distinctive flavor.

Correctly labeled as it is probably an apple
jelly, slightly flavored with currant. No glucose. A cheap, harmless product, but not of
"star" quality.)

Curtice Brothers Company, Rochester, N. Y.

- (D) Blackberries, Preserved. (Preserved with sodium benzoate.)
- (D) Pineapple Marmalade, with 10 per cent. Apple Juice.
- (D) Quince, Fresh Fruit Jam with 10 per cent. Apple Juice.
- (D) Strawberry, Fresh Fruit Jam with 10 per cent. Apple Juice.
- (D) Raspberry, Fresh Fruit Jam with 10 per cent. Apple Juice.

(Last four products contain approximately ten per cent. of "corn syrup" (glucose), ten per cent. of apple juice and one-tenth of one per cent. of benzoate of soda, all declared on the label.) Ehman Olive Company, Oroville, Cal.

* California Ehman Ripe Olives.

Gordon and Dilworth, New York, N. Y.

★ Orange Marmalade, Pure Fruit Jam.

★ Pineapple, Pure Fruit Jam.

* Raspberry, Pure Fruit Jam.

("Absolutely pure" claim objectionable as always.)

Heinz, H. J., Company, Pittsburgh, Pa.

* Currant Jelly.

* Euchred Pickle, sweet.

* Strawberry Preserves.

Humbert and Andrews, Brooklyn, N. Y.

* Raspberry Jam, Acme Brand.

* Strawberry Jam, Acme Pure.

Jefferson Pickle Company, Richmond, Va.

(N) Sweet Gherkins. F. F. V. Crystallized Pickles. (Pickles somewhat tough and shriveled.)

Kidd, Mrs. E. G., Richmond, Va.

★ Pin Money Pickles-Gherkins.

Leggett, Francis H., and Company, New York, N. Y.

* Raspberry Preserves.

Libby, McNeill and Libby, Chicago, Ill.

* Queen Olives.

* Red Raspberry Preserves.

★ Pure Strawberry Preserves.

* Sweet Midgets.

Morehouse Mills, Chicago and Los Angeles.

Mrs. Morehouse's Pure Fruit Jellies.

- (N) Crabapple.
- (N) Currant and Apple.
- (N) Grape and Apple.
- (N) Raspberry and Apple.

(Considered misbranded as there is 30 per cent. of apple juice present and only 20 per cent. of the fruit from which the product takes its name, according to declaration on the label. Should be labeled "apple jelly flavored with grape, currant, etc. Flavor due to the special fruit named very slight.)

Olney Canning Company, Burt, Oneida, N. Y.

* Strawberries, Burt Olney's.

Pratt-Low Preserving Company, Santa Clara, Cal.

* Green Gage Plums.

Robertson Preserve Company, James, The, West Somerville, Boston, Mass.

* Golden Shred Pure Orange Marmalade.

XVII

SUGARS AND SACCHARINE PRODUCTS

THE principal sugar of commerce is known as sucrose. It is produced almost exclusively from the sugar beet and the sugar cane. quantity made from the sugar beet, considering the world's production, is considerably greater than that made from sugar cane. Chemically, the sugar from the sugar beet and that from the sugar cane are identical, but this is only true when both are pure. Raw sugars from the cane and from the beet differ most markedly. Raw cane sugars are aromatic, good tasting, good smelling and delicious. Raw beet sugars are soapy, bad smelling, bad tasting, and unedible. These differences are caused by the natural differences in the ingredients of the cane and the beet. The sugar beet contains large quantities of potash. When heated the potash unites with the fatty and oily matters present in the beet and produces soaps of a bad smelling and tasting character. The potash salts themselves are bitter. The juice of the sugar cane contains very little mineral matter and no unsavory products are formed when they are subjected to heat. The natural aromatic substances of the cane give rise to pleasant odors about a cane factory, while just the opposite obtains at a beet factory. It is sometimes possible to distinguish a refined beet sugar from cane sugar by its odor, especially if it is kept in a closed container.

The pure granulated sugars made from the sugar beet and sugar cane are equally useful for domestic purposes. Some manufacturers and housewives prefer cane sugar for the making of cake, preserves, jams, jellies, etc., and also cane sugar is preferred by many confectioners. For ordinary sweetening purposes, however, for coffee, tea, etc., there is no difference between a pure high grade cane sugar and a pure high grade beet sugar. In the United States the sugars which are consumed are chiefly cane; in a consumption of four million tons only about seven hundred thousand tons are derived from the beet.

Invert sugar, which comprises almost the whole of honey, and a considerable portion of molasses and syrups, is a mixture of two sugars obtained from cane or beet sugar by a process which is known as inversion. Invert sugar is sweeter than sucrose itself and is more difficult to crystallize, hence, it is an ideal constituent of honeys, syrups and molasses.

The white sugars of commerce are practically all of a very high grade, being 99.5 per cent. pure and over. The remainder consists of ash and moisture. Low grade sugars have almost disappeared from the American market. We still have a few brown sugars which represent the second and third grades of the refinery. These brown sugars contain considerable quantities of moisture and ash, and also a little invert sugar. They are preferred for some purposes, in cooking and candy-making, to the pure white sugars.

Pure white sugars come in three forms, namely, cut or loaf sugars, granulated sugar and powdered sugar. These are all practically of equal grade. There are certain forms of lump sugar that are very carefully crystallized and broken, such, for instance, as crystal domino, that sell for a much higher price than the ordinary granulated sugars. These high price sugars, however, do not have any greater sweetening power than those ordinarily found upon the market.

A great many people do not understand the difference between molasses and syrups. There is a distinct commercial difference recognized. Molasses is a by-product of sugar-making, in other words, after the sugar has crystallized the residual liquid portions are separated and constitute the molasses. Molasses is found in three different grades, namely, firsts, seconds, and thirds or black-strap; meaning the product from the first, second and third crystallizations respectively. The molasses is separated by a machine known as a centrifugal, but in the early days of sugar-making the molasses was separated by gravity, leaving a brown sugar of rich and aromatic character and producing a molasses of the finest quality. This old fashioned New Orleans molasses is no longer obtainable in the markets.

Syrups are the product of the direct condensation of the expressed juices of the sugar-producing plants without the separation of any sugar. The only treatment which syrups should receive is that of cleansing during the process of evaporation. Thus the sap of the maple when evaporated to a proper consistency produces maple syrup. The same is true of the sap of the sugar cane and of sorghum. These three kinds of syrup are practically the only natural syrups on the market. In addition to these, a large class of so-called syrups is made by mixing. The base of the mixture is usually glucose, incorrectly called "corn syrup." Glucose can be made of potatoes, as well as of In-

dian corn and if it is to be called a syrup at all it should be called either corn starch syrup or potato starch syrup, as the case may be. According to the standards fixed by the Secretary of Agriculture, according to law, the term "syrup" unqualified signifies only the concentrated sap or juice of a sugar-producing plant. The mixing of syrups is more or less misleading in character; as an example, the following may be cited. Glucose in its natural state is never sold nor used as a table syrup. The so-called refiners' syrup, which is the last liquid product of the refinery, has such a salty taste, and such a peculiar flavor, acquired during the process of manufacture, as to be practically inedible. A large business is done in this country by mixing glucose with refiner's syrup or sugar syrup and selling them as a table syrup under various fancy names, such as Karo, Velva, etc.

There are many mixtures of maple syrup with other syrups, especially sugar syrup. In some States the percentages of the mixtures are required to be named upon the label. This should be the case everywhere. The quantity of maple syrup employed is usually extremely minute, scarcely sufficient to give the definite maple flavor, yet such syrups are sold under such a guise as to

indicate to the consumer that they are largely the product of maple. The pure food law has proved to be a great protection to the buyers of maple and other syrups, but it is not as complete a protection as could be hoped. The consumer who goes into a grocery store to-day and asks for syrup is not very apt to get an article which properly bears that name. He is more likely to secure a mixture of different kinds of syrups than to secure a pure cane, maple or sorghum product.

The use of sulphur fumes in clarifying saccharine juices and of solutions of salts of tin in whitening sugar in the centrifugal machines, introduces into the residual molasses these two objectionable products. Any notable quantity of these products, especially of sulphur dioxide would lead to the placing of the article in the noncommittal or disapproved classes. With misgivings, I have starred samples of molasses containing not over 0.007 per cent. of sulphur dioxide, according them the lowest rating for a "star" product, to this extent overlooking this minute amount of sulphur dioxide, because of the otherwise exceptionally good qualities of the product and the condition of the trade and official rulings on this point.

Honey is composed almost exclusively of invert sugar, which is gathered by bees from flowers and stored in the comb. The temptation to adulterate, especially the strained honeys, is great, inasmuch as the addition of glucose, of a syrup made from invert sugar, or of pure cane sugar syrup can be profitably practiced. These forms of adulteration, however, are easily detected by the chemist and the practice is much less prevalent than was formerly the case.

TESTED SUGARS AND SACCHARINE PRODUCTS

(Starred products (\star) are rated at 85 to 100; (N) indicates a noncommittal rating between 76 and 84; disapproved products (D), rated at 75 and less; see Introduction and page xxviii for details as to method of rating.)

Adirondacks Maple Company, Lowville, Lewis County, N. Y.

(N) Pride of the Ad-i-ron-dacks Maple Syrup.

(Claims to be "absolutely pure." The ash and other distinctive determinations were either below the average data established for first-class syrups or even below the minimum. A "border-line" product.)

American Sugar Refining Company.

- * Crystal Domino Sugar.
- * Crystal Domino Confectioner's Sugar.
- ★ Crystal Domino Granulated Extra Fine Sugar.
- * Crystal Domino Powdered Sugar.
- ★ Crystal Domino Cane Sugar Syrup. (Largely in-

vert sugar with probably a little refiner's syrup.)

Corn Products Refining Company, New York, N. Y.

- (D) Karo, Dark Colored. (Largely glucose, with approximately 10 to 15 per cent. of refiner's syrup, the last product of the sugar refinery. Not a true edible syrup, as it consists largely of dextrin, which is not a sugar at all, and the standards and usage require that an edible syrup should be a sugar or saccharine product. Not a "corn syrup" but a "corn starch syrup," or commercial glucose flavored with refiner's syrup.)
 - (D) Karo, Light Colored. (Consists largely of glucose and approximately 10 per cent. of sugar syrup and flavoring material, vanilla. The comment made above applies to this product also.)

Duff, P., and Sons, Pittsburgh, Pa.

★ New Orleans Molasses. (Minute quantities of sulphur dioxide and tin present.)

Hearn and Jones, New Orleans, La.

★ Woman's Club Brand, Pure Molasses. (Minute quantities of sulphur dioxide and tin present.)

Humbert and Andrews, Brooklyn, N. Y.

* Acme Brand Pure Strained Honey.

Leggett, Francis H., and Company, New York, N. Y.

★ Premier Brand Strained Honey.

Leslie-Durham and Company.

(N) Leslie's Maple Syrup. (A border line product, mineral ingredients are too low for a first-class maple syrup; either a very poor run or a mixture.)

Love, J. S., Hattiesburg, Miss.

★ Pure Cane Molasses. (Really a high grade cane syrup, incorrectly called molasses.)

New England Maple Syrup Company, Boston, Mass.

★ Golden Tree Pure Honey.

(N) Vermont Maple Sap Syrup. (A border line product. Claims "choicest quality, absolutely pure," which it is not. May have been the last run of the sap, or the product of a poor season.)

Park and Tilford, New York, N. Y.

★ Amber Syrup. (A pure sugar solution. Term "amber" slightly misleading, as there is a recognized variety of sorghum syrup bearing that name.)

Penick and Ford, New Orleans, La.

★ Velva Brand Breakfast Syrup. (Green label.)

(D) Velva Syrup. (A mixed glucose and cane syrup, glucose being the main ingredient (40 per cent.). Contains more sucrose than Karo but the same type of product. A sub-label declares the presence of "corn syrup." Misleading because "Velva Brand" breakfast syrup is a true

syrup while this is a cheap mixture sold under the same brand name.)

Stromeyer, J., and Company, Philadelphia, Pa.

★ Stromeyer Brand "Penn Mar" of Fancy Table
Syrup. (A good sugar syrup with a little high
grade refiner's syrup added; generally extravagant claims made for its fame and deliciousness.)

Towle Maple Products Company, St. Johnsbury, Vt.

(D) Log Cabin Syrup. (Barely flavored with maple.

Analysis shows almost none present. The
Towle process appears to "mellow and preserve
the delicate maple flavor" chiefly by excluding the maple. Claim appears to be decidedly
misleading though statement is made on label
"Made of pure cane sugar and maple sugar.")

Vagt, R., Brooklyn, N. Y.

★ Emerson Brand Pure Honey.

Vermont Maple Sugar Maker's Market, Randolph, Vermont.

(N) Vermont Maple Syrup. (A border line product, deficient in the mineral substances, which are characteristic of a true, high-grade maple syrup.)

Welch Brothers Maple Company, Burlington, Vt.

(N) Vermont Maple Syrup. (A border line product, deficient in the mineral substances, characteristic of a high-grade maple syrup.)

XVIII

TOILET ARTICLES

COLD CREAMS

MANY are the inquiries received concerning the relative merits of cold creams, the beautifying claims made for them, the best types to be used, which ones will grow hair on the face and which will not, presence of harmful ingredients, etc.

There are three principal types of cold creams; first, the grease creams, which have a base of petroleum or vaseline, with a little wax and spermaceti, which is the commonest type; second, the greaseless or "vanishing" creams which consist chiefly of glycerin and soap; and third, the casein preparations, such as the Pompeian cream. If the massaging with cold creams causes hair to grow on the face it is due to the stimulation of the circulation rather than to the grease. This theory has led nearly all makers of face creams loudly to denounce their competitors' products, as "Hairgrowing creams," while declaring that their own will "not promote the growth of down on the

face." It is safe to say that one is no more harmful than another in this particular. It cannot be said that any one type is any better than another in general. The selection of a cold cream depends entirely upon the needs of the individual skin, the climate (dry high altitudes, wind and dust, calling especially for such massage), amount of outdoor exercise and exposure, etc. For some skins glycerin is agreeable and soothing and for others it is not. This is something which must be determined by experiment. The chief objections to these products are the altogether ridiculous claims made for them. It is well enough to cleanse the pores of the skin thoroughly by massage with a cold cream, thus offsetting the drying or roughening effects of wind and weather, stimulating the circulation and rendering the flesh more firm. Further than this they have no efficacy; they will not "rejuvenate the countenance" nor perform any miracles of healing, nor will they "overcome pimples or eruptions," which are nearly always due to the general health and condition of the blood. Where such claims were very misleading, the product has been disapproved, which does not mean that it is harmful in itself. Many of these creams contain some boric acid as an antiseptic, perfume, water, soap, etc. The peroxide creams,

so-called, are usually misbranded, owing to the fact that the peroxide, even if it has been added in good faith, as is sometimes the case, is present in such unstable form that it quickly decomposes and loses its efficiency. None is found in the finished product, and therefore, no bleaching effect will be produced by the majority of the creams as found on the market.

It has been established in the courts in connection with a case brought against Sartoin, a socalled "skin food," that this claim is not permissible and that you cannot feed the skin by external applications. The skin must be fed by assimilation from within. In the Notice of Judgment published in regard to this product, the statement was made that "there is no such thing as a 'skin food' separate and apart from a food that nourishes all parts of the body"; "said article and preparation could not possibly be a food under any circumstances." This particular product, incidentally, consisted of epsom salts, colored pink and was offered as a skin food, whereas many of the bath mixtures offered as reduction cures, have the same constituent. Strange that the same preparation should reduce the weight under one label and "feed the tissues" under another. This is a good example of the foolish conflicting claims made for these simple preparations. "Madame Yale's" skin food was 76 per cent. vaseline, mixed with fixed oil and zinc oxide, perfumed and colored pink. The courts declared that the statement: "It is soothing in its effect on the skin, healing as a magic balm and fattening in its qualities" was false and misleading in that "the said drug is simply an ordinary ointment." It is strange in the face of these facts that the makers of cold creams will continue to make such obviously false claims for their harmless, simple products.

The following is the pharmacopæial formula for a cold cream, which any one can have put up at a drug store; or a petrolatum product may be bought in bulk as used by the theatrical profession, much more cheaply than when bought in small fancy packages.

Ointment of Rose Water

Spermaceti	125	grams.
White Wax	120	"
Expressed Oil of Almond	560	"
Sodium Borate	5	"
Stronger Rose Water	190	"

To make about (2 lbs. 3 oz.). 1000 grams.

The only really dangerous products among the cold creams are the so-called freckle creams, which

contain ammoniated mercury, a poisonous ingredient which causes the skin to peel and takes the freckle with it. The different types of cold creams have been indicated in the list for the guidance of the buyer.

TESTED TOILET PREPARATIONS *

(Starred products (★) are rated at 85 to 100; (N) indicates a noncommittal rating between 76 and 84; disapproved products (D), rated at 75 and less; see Introduction and page xxviii for details as to method of rating.)

COLD CREAMS

American Druggists' Syndicate, Long Island City, N. Y.

- (D) A. D. S. Antiseptic Shaving Cream. (Consists of a semi-liquid soap containing a small amount of benzaldehyde and glycerin. Extravagant claims decrying soap, when it is merely a soap preparation. Antiseptic value slight.)
 - (D) Peredixo Cream. (Soap, water and starch; no peroxide found. Claims to be "The original Peroxide Cream," and to contain "peredixo," a great healing agent, unwarranted.)

Armour and Company, Chicago, Ill.

(N) Crême Luxor. (The usual type of "vanishing" cream containing glycerin and soap. A good product still handicapped with extravagant

^{*} These are in no sense complete statements of analyses; only the most essential and characteristic ingredients are mentioned.

- claims such as "rejuvenates," "healing," though former labels implying "skin nourishment" have been withdrawn.
- (N) Luxor Cold Cream. (A white petrolatum and wax product, of good quality, perfumed; misleading statements to the effect that it is "unequaled," "soothes all irritations of the skin," "rejuvenates," etc., still remain, though the "skin food" claims, etc., have been withdrawn.)

B. H. Company, The, Boston, Mass.

- ★ Priscilla Parsons Cold Cream. (Consists of white petrolatum, wax, and boric acid perfumed, "for general use.")
- ★ Priscilla Parsons Liquid Cream. (Borax, stearic acid and glycerin, perfumed; "A skin cleanser for tourists"; no misleading claims. Good products and dignified labeling.)

Colgate and Company, New York, N. Y.

★ Cold Cream. (Fat, petrolatum, wax, soap, and perfume. Claim that it is "unequaled" is not warranted.)

Crane, James C., 108 Fulton Street, New York, N. Y.

★ Crême Elcaya. (A good glycerin and soap product, perfumed. Statement that it "will not promote growth of hair like the usual cold creams" is objectionable; "renders skin soft, white and beautiful" is also mildly extravagant.) Daggett and Ramsdell, New York, N. Y.

★ Perfect Cold Cream. (Fat, wax, petrolatum, soap and perfume. Typical of a good grease cream. Superlative statements that it is "unequaled for massage"—"The best of all applications," etc., unwarranted.)

De Meridor Company, The, New York and Paris.

(D) Crême de Meridor. (The soap and glycerin type, perfumed, containing 73 per cent. of water, no fat or wax. Impossible claims as to stimulating and nourishing the skin, and overcoming sallowness, freckles, eruptions, etc.; unwarranted inference that greasy creams deaden and injure the skin. Revision of claims in progress.)

Espey, J. E., Chicago, Ill.

★ Fragrant Cream, Espey's. (A very pleasing glycerin and Irish moss compound borated. Extreme quality claims and use of superlatives are deprecated. Said to be the "only perfect substitute for glycerin," when it contains glycerin.)

Fay, C., Paris.

(N) Crême Imperatrice. (A saponifiable fat, colored pink and perfumed, containing some zinc ozide and bismuth subcarbonate. Absurd claims as to preventing and concealing wrinkles and freckles. No special advantage over cold cream for general use, as claimed.)

Franco-American Hygienic Company, Chicago, Ill.

- (N) Hygienic Crême Eogiene. (A good glycerin preparation containing boric acid, soap and water. Meaningless claims that it will "impart a transparent effect not achievable by any other treatment.")
- Gannon, E. M., Woodside, N. J., or W. M. Willett, San Francisco, Cal.
 - (D) Wakelees Camelline. (A suspension of bismuth subcarbonate, and calcium carbonate in rose water, colored pink. Extravagant claims that it will "remove eruptions, sallowness, restore the color of youth, preserve the teeth from decay,"—"a new discovery," etc.)

Gillé, E., 1 Hamilton Grange, New York.

- (D) Almond Skin Food. (Saponifiable fat with almond perfume. Had become rancid; name not warranted, in any respect. Improbable that true almond is used and there is no such thing as "a skin food.")
- ★ Disappearing Cream. (The usual soap and glycerin compound with boric acid and perfume.)
- (N) Lemon Cleansing Cream,
- (N) Strawberry Beauty Cream.

 (Fair quality; saponifiable fat, perfumed

with lemon in one case and colored with cochineal in the other.)

- Graham, Mrs. Gervaise, 1475 Michigan Avenue, Chicago, Ill.
 - (D) Kosmeo. (Saponifiable fat and perfume. Of only ordinary quality; claims that "It has no equal," "keeps the skin fine grained," not permissible.)

Hinds, A. S., Portland, Me.

(N) Honey and Almond Cream. (A good glycerin and soap preparation, containing borax and alcohol; amounts of honey and almond are negligible in the finished product. Could not be found by the chemist though certified to be added in small amounts. Considered misbranded for this reason.)

Hubert, Professor, Toledo, Ohio.

(D) Hubert's Malvina. (One of the dangerous freckle creams, contains ammoniated mercury (a poisonous salt), mineral oil and fat; is offered for saltrheum, ring worm, etc., as well as for freckles and falling hair.)

Imperatrix Company, New York, N. Y.

★ Imperatrix Skin-Cream. (Perfumed lanolin (fat from sheep's wool) especially absorbent. Claims as to efficiency for beautifying the skin, treatment for pimples, black heads, etc., mildly objectionable.)

Johnson, B. J., Soap Company, Milwaukee, Wis.

(D) Palmolive Cream. (Petrolatum, wax, saponi-

fiable fat, boric acid and perfume. Most extreme claims are made as to its nutritious properties, "an actual body food acting like magic, healing in a night." Name also misleading as it contains little if any palm and olive oils. The claims, however, are impossible regardless of its composition.)

Keeler, Charles C., Atlantic City, N. J.

(D) Superior Cold Cream. (A petrolatum, wax, and saponifiable fat product, perfumed with rose geranium. The claims that it is "The cream that is different," "is superior to all others for massage purposes," "feeds the tissues and prevents wrinkles," "is the only thorough cleanser on the market," are not warranted in any particular.)

Lyon Manufacturing Company, Brooklyn, N. Y.

(D) Hagan's Magnolia Balm. (A glycerin, zinc oxide and water lotion. Claims to be a "secret aid to beauty, restore the bloom of youth to faded cheeks, resist the ravages of time, eradicate freckles, eruptions, etc."; could do none of these things, obviously.

Marietta Stanley Company, Grand Rapids, Mich.

(N) "Sempre Giovine" (Always Young). (A solid cake made of a mixture of palm and other oils for massage purposes. Formerly very extravagant claims were made for this product,

which have been notably moderated. The name itself is somewhat objectionable, as no massage medium is a "fountain of eternal youth.")

Plexo Preparations Inc., New York and Paris.

- ★ Plexo Cleansing Cream. (Unsaponifiable oil with wax, perfumed. General claims only mildly exaggerated.)
- (N) Plexo Greaseless Cream. (Stearic acid, soap, glycerin, borax, and perfume, not entirely greaseless, therefore not a "perfect vanishing cream." Could not give "healthy, natural color and glow," as claimed.)
- Pompeian Manufacturing Company, 28 Prospect Street, Cleveland, Ohio.
 - ★ Massage Cream. (Moist casein with benzaldehyde, benzoic acid, and a harmless pink dye. Moderate claims made based chiefly on the value of the massage. A stiff greaseless product.)

Pond's Extract Company, Clinton, Conn.

- ★ Vanishing Cream. (A typical well compounded, glycerin and soap preparation, perfumed.)
- Pray, Dr. J. Parker, 12 E. 23rd street, New York, N. Y.
 - (D) Van-Ola. (Zinc oxide, mineral oil, wax, fatty oil. Claims to be the "Finest compound known," to "cure pimples," etc.; composition does not warrant claims.)
 - ★ Dr. Pray's Gloria-Lily Lotion. (A preparation of glycerin, boric acid, Irish moss and aromatic

balsam. Slightly extravagant claims as to curing sunburn, rough dry skin, etc.)

Pura Manufacturing Company, Lancaster, Pa.

(D) Almond Dulce Hymettus Honey Cream. (Free fat and stearic acid, held as an emulsion with soap, water and probably gum; borax and invert sugar present, perfumed with benzaldehyde and other oils. Nothing in composition to warrant the claim that it is a very quick and efficient remedy for burns, scalds and skin eruptions. Its antiseptic action is slight and honey and almond present in very small amounts if at all.)

Rose Petal Wrinkle Cream Company, Ridgefield Park, N. J.

(D) Rose Petal Wrinkle Cream. (Two ounces of a soft grease perfumed with rose geranium and sold for one dollar. Would have no special value in "preventing wrinkles," or in "keeping the complexion fresh and youthful as compared with any cold cream.")

Royal Manufacturing Company, Toledo, Ohio.

(D) Rex Wrinkle Pencil. (Consists of petrolatum, wax and saponifiable fat like lard or stearin.

No special efficacy for "sallow complexion," "large pores," etc.)

Simon, J., Faubourg St. Martin, 59, Paris.

** Crême Simon. (Zinc oxide, glycerin, and per-

fume. Mildly objectionable claims, such as "unrivaled for care of skin," etc.)

Stillman's Freckle Cream Co., Aurora, Ills.

(D) Stillman's Freckle Cream. (Another of the objectionable freckle creams containing ammoniated mercury.)

To-Kalon Manufacturing Company, Inc., New York, London and Paris.

(D) Crême Tokalon. (This cream consists of water, glycerin, boric acid and considerable free fatty acids, probably a mixture of stearic and palmitic with a little gummy substance, possibly Irish moss. No soap is present and no oils or fats. A good glycerin preparation with impossible claims, such as "Possesses astonishing properties for quickly restoring the appearance of youth," "Meets all the requirements of both health and beauty," "After one application over night will produce most astonishing results," etc.)

HAIR TONICS, SHAMPOOS, ETC.

Few hair tonics are injurious, but fewer still can fulfill the claims that are made for them. A hair tonic is usually an alcoholic solution of some of the bodies (such as resorcin, cantharides, and pilocarpin), believed to have some stimulative effect on the scalp. They owe their efficiency in no small degree to the massage with which they are applied. In hair health, as in body health, the treatment must be fitted to the conditions and therein lies the weakness of all such generalized treatments. The health of the hair depends to a great extent upon the health of the body, nervous condition, circulation of the blood, etc., and where this is the case, obviously external treatment is only palliative. It cannot cure. One person's hair may be too dry and another too oily. Is it common sense to apply the same treatment to both? In one case a little carbolated vaseline massaged into the scalp might be of more benefit than a drying alcoholic tonic. The stimulative principles, when they are expensive, are usually present in very small amounts. We are not going into the hair tonic business, but suggest the following formula put up with water

instead of alcohol, as one having general stimulative principles: Pilocarpin nitrate, 1 gram; resorcin, 25 grams; water, 500 grams.

As for the various shampoo powders which depend upon washing soda and borax to dry out the hair and give the fluffy effect promised, they must certainly be injurious if their use is long continued. They are expensive and the claims made for them are not true. Nearly all of the tonics claiming to "restore the color of the hair" without dyeing it depend upon the interaction of lead acetate and sulphur to brown the hair. Lead acetate is a poisonous salt and while the actual injury done will vary with the individual susceptibility, the extent to which the tonic is used, etc., it cannot be considered a legitimate ingredient of a product to be rubbed into the scalp.

Black hair dyes frequently contain nitrate of silver, which while less poisonous than lead, is still dangerous when used by the inexperienced. Serious consequences frequently follow the constant use of such products, the damage varying with the individual susceptibility. No hair dyes can be recommended. As one eminent dermatologist has said, "The only sensible thing to do with gray hair is to admire it." Dyeing is unesthetic, as well as unhygienic. The hair soon becomes dead and

dingy in color and repeated applications of the dye must be made, so that the results are undesirable from the standpoint of beauty, as well as from that of cleanliness and health.

TESTED HAIR TONICS, SHAMPOOS, ETC.*

(Starred products (★) are rated at 85 to 100; (N) indicates a noncommittal rating between 76 and 84; disapproved products (D), rated at 75 and less; see Introduction and page xxviii for details as to method of rating.)

Alexander and Mendes, New York, N. Y.

★ Brilliantine (Carnation). (Merely an unsaponifiable oil, perfumed with cloves. Harmless but no lasting efficacy.)

American Druggists Syndicate, Long Island City, N. Y.

★ A. D. S. Liquid Shampoo. (A liquid soap containing about 60 per cent. of water.)

Empress Manufacturing Company, New York City.

(D) Empress Improved Instantaneous Hair Color Restorer. (A solution of paratoluylene diamine with sodium sulphite and sodium hydroxide. Ammonium persulphate is also present. One of the least objectionable anilin dyes but could not be guaranteed to be noninjurious in all cases. Statement that it is "absolutely harmless" and "perfectly hygienic" could not be guaranteed for this or any other hair dye. Is not a "color restorer" but a dye.)

^{*} These are in no sense complete statements of analyses; only the most essential and characteristic ingredients are mentioned.

Gillé, E., 1 Hamilton Grange, New York, N. Y.

- (N) Dandruff Salve. (Fat perfumed with oil of cloves. No special claims made; of no more value than any good vaseline.)
- (D) Shampoo (Spun Gold).
- (D) Tonic (Spun Gold).

(A deliberate deception, as the shampoo is especially stated to be not a bleach, which is true, but the accompanying "tonic" is nothing more nor less than the regular bleach, peroxide, containing acetanilid.)

Giroux Manufacturing Company, Buffalo, N. Y.

★ Parisian Sage Hair Tonic. (No harmful ingredients present. Contains glycerin, capsicum and very little sage, name hardly justified. Small amounts of resorcin and cantharides indicated. The claims made in the advertising material are moderate, as they should be.)

Hall, R. P., and Company, Nashua, N. H.

(N) Hall's Hair Renewer. (No lead and true to label. Moderate claims made, "For the treatment of falling hair," etc., but "Restores hair in the majority of cases," too strong for any hair tonic.)

Hiscox Chemical Works, Patchogue, N. Y.

(D) Parker's Hair Balsam. (A solution of lead acetate with suspended sulphur. The lead salt is poisonous.)

Johnson, B. J., Soap Company, Milwaukee, Wis.

(N) Palm-Olive Shampoo. (No constituent found which justified the name. Soap and glycerin present with alcohol as declared.)

Lavox Company, The, Chicago, Ill.

(D) Lavox Shampoo powder. (Soap and borax. Claims that it does not make the hair dry and brittle and should be used once a week and does not destroy the oil of the scalp, obviously misleading.)

Peterson, H. S., and Company, Chicago, Ill.

(D) Canthrox. (Merely borax, soap and washing soda. A mixture that would dry out the oil of the scalp very materially and be injurious in time, if continuously used. Price out of all proportion to cost.)

Philo Hay Specialties Company, Newark, N. J.

(D) Hay's Hair Health. (Another solution of sulphur and lead acetate, the latter deemed dangerous.)

Pinaud, Ed., 18 Place Vendome, Paris.

★ Eau de Quinine. (An alcoholic extract of quinine, delicately perfumed. Amount of quinine present is very small and its tonic properties are problematic. Claims, however, are moderate, as they should be.)

Seele-Thompson Company, New York.

(D) Mme. Seele's French Hair Bluing. (Harmless,

but claims to be not a dye or stain while it is in reality methyl violet, a coal tar dye.)

Tokalon, Inc., New York.

(D) Lavona (de Composée). (A liquid in a three ounce bottle, consisting essentially of alcohol 25 per cent., salicylic acid, glycerin, some saponin-like substance (probably present as quillaja—soap bark tree—extract), a suggestion of oil of bay, and water. No alkaloids, caffein nor tannin present. Claims that it is "an unrivaled hair tonic" and "contains the most efficacious drug known for stimulating the activity of the hair growing follicles as well as the pigment-forming cells," unwarranted.)

Vibert, F., Lyons, France.

(D) Petrole Hahn for the Hair. (About ⅓₁₂ of the volume of the liquid is mineral oil, mostly kerosene; contains no metals nor resorcin; essentially alcohol, water, mineral oil, with perfuming and pungent oils and some resinous drug. The small amount of mineral oil present might have some antiseptic value, but the claims that "without any exaggeration the action of Petrole Hahn may be described as marvelous," "It is indispensable to all who value and wish to retain abundant hair," "to retain its natural color, etc.," are untenable.)

Warden Company, Chicago, Ill.

(D) Ward's Dandru-Cide Shampoo. (Ten cents' worth of crystallized washing soda sold for one dollar. Altogether too harsh and drying an alkali for use as a shampoo and the price is exorbitant. Claims to be "a magical preparation," "unsurpassed for treatment of an itching scalp," "The world famous dandruff destroyer," etc.)

Waldeyer and Betts, 170 Fifth Avenue, New York, N. Y.

(N) Swedish Hair Powder. (Merely talc, starch, and powdered orris, used to remove the oil of the hair by brushing. Harmless but hardly "A shampoo substitute.")

Wildroot Chemical Company, Buffalo, N. Y.

(D) Dandruff Remedy, Wildroot. (Contains arsenic, and some phenolic body, probably resorcin; perfumed and colored. The trace of alkaloidal material present was too small for identification. Contains 40 per cent. of alcohol, as declared, and less than ½ of one per cent. of nonvolatile matter. Claims that it is an herb compound and a positive remedy for eczema and dandruff obviously untenable.)

MISCELLANEOUS PREPARATIONS

These miscellaneous toilet preparations present but little opportunity for comment, except that the depilatories and perspiration preventatives are of dubious efficacy, and of very doubtful healthfulness. Perspiration should not be checked and the products used to bring this about are usually irritating and contract the pores so that a double harm may be done.

Many inquiries are received in regard to the depilatories. They nearly all depend upon sodium or barium sulphide, which removes the hair superficially, with more or less danger, varying with the frequency of its use, the amount applied, and the sensitiveness of the individual skin. As long as the root of the hair is not destroyed, the hair will return and the claims made for these products are out of all proportion to their efficiency. Nearly always fancifully named toilet preparations contain simple, well known ingredients for which extravagant claims are made and an exorbitant price is charged. They are usually harmless, except in so far as one's time and money are wasted and only disappointment ensues.

TESTED MISCELLANEOUS PREPARATIONS *

(Starred products (★) are rated at 85 to 100; (N) indicates a noncommittal rating between 76 and 84; disapproved products (D), rated at 75 and less; see Introduction and page xxviii for details as to method of rating.)

Armour and Company, Chicago, Ill.

(N) Luxor Bath Powder. (Fifty cents is an exorbitant price for a package of crystallized, perfumed, washing soda. Is not "exhilarating and invigorating," as formerly claimed.)

B. H. Company, Boston, Mass.

(D) Priscilla Parsons Perspiration Preventative. (A water solution of zinc chloride. Might be irritating, which fact is virtually admitted on the label. The artificial checking of perspiration by possibly irritating substances cannot be considered hygienic.)

B. and P. Company, Cleveland, Ohio.

(N) Wrinkle Eradicator. (Merely sheets of perforated court plaster; mechanically may have some value in stretching the skin, but the claims as to medication are not substantiated.)

De Miracle Chemical Co., New York City.

- (D) De Miracle Depilatory. (An aqueous solution
- *These are in no sense complete statements of analyses; only the most essential and characteristic ingredients are mentioned.

of sodium sulphide, containing dissolved sulphur with a trace of sodium sulphite and perfumed with bay rum. Very extravagant claims are made for this simple preparation, which merely removes the hair superficially.)

Dry Pits Lotion Company, St. Louis, Mo.

(D) Dry Pits Lotion. (Two and one-half ounces of aluminum chloride in water. Price on label \$1. An extravagant preparation of doubtful efficacy and healthfulness. Checking of perspiration by these astringents cannot be considered harmless.)

Floridine Manufacturing Company, 42 Franklin Street, New York.

(N) Lustr-ite Nail Enamel. (A harmless infusorial earth for polishing the finger nails; exaggerated claims.)

Forquignon Manufacturing Company, New York, N. Y.

- (N) F. B. Foronga Nail Bleach. (Tartaric acid and boric acid, colored with a green coal tar dye. Therefore the claim "purely vegetable" is not warranted. Is slightly antiseptic and noninjurious.
- (N) F. B. Polpasta Nail Enamel. (Petrolatum with pumice stone, boric acid and soluble dye. Antiseptic and preservative virtues claimed are very slight.)

Mühlens and Kropff, New York, N. Y.

★ Eau de Cologne Sea Salt.

Mum Manufacturing Company, 1106 Chestnut street, Philadelphia, Pa.

(N) Mum (Deodorant). (A harmless deodorant consisting of fat with benzoic acid and zinc oxide.

No special claims made. Efficacious in some cases.)

Murray, Joseph T., Rochester, N. Y.

(D) Beaux Yeux. (A glycerol of pepsin, colored with cochineal and flavored with oil of rose. The pepsin present is in an active state and was found to digest egg albumen. Would brighten the eyes only when natural pepsin was lacking, and dull eyes were due to indigestion! A most overrated product as it could not "intensify the natural color of the eyes and make them very brilliant.")

Odorono Company, Cincinnati, Ohio.

(D) Odor-O-No. (Essentially a solution of aluminum chloride, with a little free hydrochloric acid, and a trace of bromid, artificially colored; 1% fluid ounces sold for fifty cents. It may clog the pores and irritate the skin. The "Journal of the American Medical Association" declares the preparation to be "both fraudulent and dangerous.")

- Pray, Dr. J. Parker, 12 E. 23rd street, New York, N. Y.
 - ★ Diamond Nail Enamel. (Infusorial earth, eosin (coloring). Claim "a brilliancy equal to diamonds," is obviously a flight of fancy.)
 - (D) Ongoline. (Tartaric acid and orange flower water; claims to be a new compound having special efficacy and warns against oxalic acid, which is more efficacious and while poisonous is not injurious for external use.)
 - (D) Rosaline. (Essentially fat, wax and eosin (coloring). The claims that it is "A skin beautifier, containing high medicinal virtues," that it "preserves the skin," and is "superior to any rouge," are entirely unwarranted.)

Stenzie Manufacturing Company, San Francisco, Cal.

(D) Stenzie. (A plastic mixture of colophony, with some balsam and a small quantity of pink dye. The price \$1.50 is exorbitant. The hair is removed superficially, merely by applying the preparation in a plastic condition and stripping it off after it has hardened, which would appear to be a rather crude and painful process of removing hair.)

PERFUMES

Chemical analysis gives but little information concerning perfumes. Only an expert can satisfactorily differentiate between these as to quality. The tests made were merely to determine in a general way the delicacy of the perfume. Some synthetic blends are so carefully made that only a well trained olfactory nerve could distinguish them from the true flower essence. In other cases. as with the violet, for example, the true perfume and the artificial ionone used to simulate it, are quite easily distinguished. Very occasionally the point is raised that refined methyl or wood alcohol. known as columbian spirits, is used in perfumes instead of ethyl alcohol. While the refined spirits are not so objectionable as the crude wood alcohol, which could hardly be used because of its odor, still the action of even the refined product on the optic nerve is such as to render its use in perfumes inadmissible, as they might be employed for bathing the head and eyes, and would be objectionable if not dangerous. Sometimes a point on excessive price, in comparison with quality could be checked, but for the most part the selection of a perfume is

merely a matter of personal preference and relative expensiveness, and no special protection can be afforded the consumer by an examination.

TESTED PERFUMES

(Starred products (*) are rated at 85 to 100; (N) indicates a noncommittal rating between 76 and 84; disapproved products (D), rated at 75 and less; see Introduction and page xxviii for details as to method of rating.)

American Druggists' Syndicate, New York, N. Y.

(N) Violet Toilet Water. (Colored green. Apparently artificial odor not especially delicate.)

Bourjoias, A., and Company, Paris.

(N) Bouquet Manon Lescaut. (Only a strong cologne, for which a high price (\$1.60) is asked.)

Colgate and Company, New York, N. Y.

★ Eclat (Perfume).

★ Imperial Lilac. (A good toilet water.)

Crown Perfumery Company, London.

(N) Crown Lavender Salts. (Objection to the claim that these salts "purify the air in sick rooms," etc. They do not purify the air at all, but merely mask unpleasant odors by an agreeable one, quality good.)

Dralle, Hamburg.

* Illusion Violette, Violet, Veilchen.

Gelle Frères. Paris.

* Seduction.

Hanson and Jenks Company, New York, N. Y.

- ★ Sweet Peas (perfumery).
- * Violet Toilet Water-Brut.
- * Wood Violet Toilet Water.

Hudnut, Richard, New York, N. Y.

★ Violet Sec Toilet Water. (Appears to be artificial violet.)

Jennings Company, Grand Rapids, Mich.

* Dorothy Vernon Perfume.

Lanman and Kemp, New York.

* Florida Water.

Lazell, New York.

- ★ Lazell's Field Violets.
- ★ Lazell's Japanese Honeysuckle Perfume. (Synthetic perfume.)

Pinaud, Ed., Paris.

★ Lilas de France—Extrait Végétal.

Rieger, The California Perfumer, San Francisco.

★ Flower Drops—Violet. (An expensive product \$1.50, but having the perfume of natural violets. Claims somewhat excessive. "The most exquisite odor in the world, one drop diffuses the odor of thousands of blossoms.")

Roger and Gallet, Paris.

- ★ Eau de Toilette—Pois de Senteur. (Sweet Pea.)
- * Extrait de Violette de France.

Vantine, A. A., and Company, New York, N. Y.

★ O Lotus San (Perfume.)

- ★ East India Sandal Wood Sachet.
- ★ Sandalwood (Perfume.)
- * Wisteria Blossom Perfume.
- * Wisteria Blossom Sachet.
- * Wisteria Blossom Toilet Water.

Vogue Perfumery Company, 234 5th Avenue, New York.

★ Vogue Extrait Vegetal Lilasette Fleur. (A glycerin alcoholic solution, perfumed with lilac. Mildly extravagant claims as to quality.)

Wrisley, Allen B., Company, Chicago, Ill.

★ San Toy (Perfume.) (Another case of somewhat exaggerated claims as to quality as: "Unrivaled by imported perfumes.")

POWDERS

None of the powders are specifically injurious except in so far as their continuous use without proper massaging and cleansing fills the pores of the skin, and so is undesirable. They consist in most cases of tale, with sometimes a little starch. calcium carbonate, or zinc oxide; boric acid is frequently added as an antiseptic and should be included in the name of the product if present. The zinc oxide is used largely for mechanical reasons and is not at all objectionable. A mixed powder should be called a toilet or face powder, not a straight talcum. The buyer has a right to know what he is getting. The rice powders, which are of a finer texture, frequently contain considerable amounts of talc, and as the former is the more expensive ingredient, such products are misbranded and must be considered fraudulent, if the talcum is not plainly declared on the label.

Apart from these considerations, the main criticism of the toilet powders, is the extravagant claims made for them. They cannot be considered "complexion beautifiers" nor to have any real value as "healing agents." For one well-known talcum powder, it was formerly claimed that it

gave immediate relief for chickenpox, measles and scarlatina, and prevented decay of the teeth. Such extravagant claims for the temporary soothing, cooling effect, that dusting the skin with any borated powder might produce, are obviously unwarranted. Some are finer in texture, more carefully purified, and more delicately perfumed than others, but any of them may be safely used in moderation, and the choice is largely a matter of individual taste.

TESTED TOILET POWDERS

(Starred products (★) are rated at 85 to 100; (N) indicates a noncommittal rating between 76 and 84; disapproved products (D), rated at 75 and less; see Introduction and page xxviii for details as to method of rating.)

Allen Pharmacal Company, New York, N. Y.

* Royal Violet Borated Talcum Powder.

American Druggists' Syndicate, Long Island City, N. Y.

★ A. D. S. Majestic Lilac Talc.

Armour and Company, Chicago, Ill.

★ Extra Fine Complexion Powder. (A good zinc oxide, calcium carbonate, and talc powder, perfumed and tinted pink. Hardly "extra fine" especially for the price (50 cents).

B. H. Company, The, Boston, Mass.

★ Priscilla Parsons Face Powder. (Disclosed tale, zinc oxide, pink dye and very strong musk odor.)

Caswell, Massey Company, Ltd., New York, N. Y.

(N) Casma Taleum. (Extravagantly praised as a "perfect, magnificent article." The usual borated taleum powder, borax not declared.)

Colgate and Company, New York, N. Y.

(N) Violet Talcum Powder. (Claims that it "keeps the skin in a healthy condition," "formula of an eminent physician," unwarranted. A good talc, borated and perfumed—nothing more—borax not declared.)

Crane, James C., 108 Fulton Street, N. Y.

(N) Elcaya Rice Powder, Avec Talc de Venise Purifé.

(Called a rice powder but is 1/3 talc, added for good mechanical reasons, but should be plainly labeled "Rice Powder with talc" in English.

French wording in small type, objectionable.)

Freeman Perfume Company, Cincinnati, Ohio.

(N) Freeman's Medicated Face Powder. (Talc and zinc oxide, good quality, but claims as to medication and effects as a complexion beautifier unwarranted.)

Gillé E., 1 Hamilton Grange, New York, N. Y.

- * Cream White Face Powder.
- * Flesh Face Powder.
- * White Face Powder.

(Usual zinc oxide, talc and calcium carbonate combination, tinted; no special claims made.)

- Gomi, T. D., Geisha Importing Company, 3 East 17th St., New York City.
 - (N) Oriental Wistaria Taleum Powder. (Should be labeled "borated," a good powder.)

Heyer, George W., Houston, Texas.

★ Heyer's Prickly Heat Powder. (Consists largely of zinc oxide with starch and small quantities of camphor and phenol. Claims moderate. "For heat and itching of skin.")

Hudnut, Richard, New York, N. Y.

(N) Violet Sec Talcum. (Should be labeled "borated," a good powder.)

Kirk, James S., Co., Chicago, Ill.

(N) Jap-Rose Toilet Talcum Powder. (Composed of talc and zinc oxide; a borated toilet or complexion powder. Is not a straight talcum, strictly speaking, when so compounded.)

Lehn and Fink, New York, N. Y.

★ Riveris Talcum Powder. (Talcum; excellent quality with fine perfume. Not "a necessity for baby's health" as claimed.)

Levy, Ben., Company, Boston, Mass.

(N) LaBlache Face Powder. (A good powder, (talc

and zinc oxide) which claims to produce "a clear, healthy complexion." This is obviously impossible. It merely conceals blemishes, the same as any other powder.)

Marinello Company, Chicago, Ill.

★ Marinello Powder. (A slight trace of heavy metal, tin or antimony, probably present as an impurity in the zinc oxide.)

Mennen, Gerhard, Chemical Company, Newark, N. J.

- ★ Borated Talcum Toilet Powder. (A high grade talcum now accurately labeled.)
- ★ Violet Talcum Toilet Powder Borated. (A good borated talcum powder, perfumed. Claim "scientifically borated" meaningless, but revised labels are conservative.)

Napoleon Pharmacal Company, New York, N. Y.

★ Napoleon Lilac Aseptic Toilet Powder—Borated.

Plexo Preparations, Inc., New York and Paris.

(D) Plexo Evening White. (A semi-liquid mixture of zinc oxide, calcium carbonate and alcohol. Has artificial violet perfume. Claims to conceal all imperfections and still to be invisible. "Will not rub off"; claims not tolerable.)

Pozzoni, J. A., Pharmacal Company, Chicago, Illinois.

(N) Pozzoni's Gold Puff Box. (Extravagant claims for a complexion powder and rouge, both containing a pink dye and the powder carrying bismuth subcarbonate and zinc oxide. Not injurious but over praised.)

Pray, Dr. J. Parker, New York, N. Y.

(D) Dr. Pray's Hy-Gen-ia Face Powder. (Talc, zinc oxide and starch with some magnesium carbonate. Claims that it is healing, does not clog glands or pores of the skin, a preservative and medicinal powder, are deemed unwarranted.)

Pura Manufacturing Company, Lancaster, Pa.

(D) Hymettus Rose-Violet Talcum Powder. (Contains zinc oxide, boric acid and talc, with a delicate perfume. Many talcum powders are borated and the claims that it is "softer, finer and more refreshing than other talcum preparations," and that it "heals" are not warranted. Is not a straight talcum; should be labeled "a borated toilet or complexion powder."

Stafford-Miller Company, St. Louis, Mo.

(D) Carmen Complexion Powder. (Usual combination of talc, zinc oxide and starch, perfumed and colored. Claims that it is the "best for the skin," "never dusts off," "never shows powder," "superior to other complexion powders," etc., are unwarranted.)

Tetlow, Henry, Philadelphia, Pa.

(D) Tetlow's Superb Gossamer, Harmless for the Complexion. (Another combination of talc, zinc oxide, starch and perfume. Good in itself, but claims that it "really nourishes, benefits and softens the skin," does not obstruct the pores, and is superior to all others, absurdly overdrawn.)

Vantine, A. A., and Co., New York, N. Y.

- ★ Geisha Face Powder. (Talc, zinc oxide and starch, perfumed and colored.)
- ★ Kutch Sandalwood Talcum Powder. (Talc, powdered orris, and sandalwood oil.)
- ★ Wistaria Blossom Tale. (Perfumed talcum powder with a little starchy material.)

Vogue Perfumery Company, New York, N. Y.

- (D) Vogue Poudre de Riz. (Claimed to be a rice powder but is 84 per cent. talc. Is, therefore, plainly misbranded. No objection to adding some talc, for mechanical reasons, if declared.)
 - ★ Vogue Liquid Complexion Powder. (Merely zinc oxide and a little calcium carbonate suspended in perfumed water.)

Williams, J. B., Company, Glastonbury, Conn.

(N) Violet talcum powder. (A good borated talcum powder perfumed with artificial violet. Claims that it is "unequaled for the toilet," "produces a soft, healthy condition of the skin, etc.," are extravagant, as they would be for any talcum powder; borax should be declared.)

Wrisley, Allen B., Company, Chicago, Ill.

(D) San Toy Talcum. (The usual combination of talc, starch, calcium carbonate, and perfume; no boric acid nor zinc oxide found and still it is claimed that the powder is "highly antiseptic and healing"; "absolutely perfect.")

SOAPS

The main points in regard to the soaps are to be sure that there is no free alkali or only a trace, and not too much water, that is, that you are getting a fair amount of soap for your money, and not paying for water. The high priced soaps contain no more soap, are no more cleansing and are no purer than many of the five cent products; in fact, sometimes the contrary is the case. If a woman wishes to pay 25 cents to one dollar for a perfumed, colored cake of soap, daintily wrapped, for the pleasure of using it, well and good, but she should know that she is not getting "a bargain." Glycerin soaps, for example, while of good quality and useful for some skins, are not economical, as they "waste" more quickly than other types.

The medicated soaps with almost no exceptions must be criticised on account of their extravagant claims. Any soap has some little antiseptic properties, but the amount of antiseptics added to soaps and the conditions under which they are used make it impossible that they should fulfill any extravagant claims as to healing skin diseases or producing anything approaching

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complete antisepsis. They present another example of permissible products over-burdened with impossible claims. Other soaps we are obliged to criticize on the ground of misbranding, since their composition does not warrant the name given them, which would imply the presence of certain ingredients or oils not found in any material quantities. None of the soaps are really harmful except in so far as the extravagant claims made for them might be misleading and cause one to neglect more important precautions and depend upon them for services they could not perform.

TESTED SOAPS

(Starred products (*) are rated at 85 to 100; (N) indicates a noncommittal rating between 76 and 84; disapproved products (D), rated at 75 and less; see Introduction and page xxviii for details as to method of rating.)

American Druggists' Syndicate, Long Island City, N. Y.

- (D) A. D. S. Kurakutic Soap. (Misleading name in apparent imitation of "cuticura." No phenols or other antiseptics detected. Claim "invaluable for skin purification," misleading.)
- (D) A. D. S. Improved Foot Soap. (Contains bran, borax, eucalyptus, but no free iodine, nor free olive oil, nor combined iodide in any form (as claimed) could be detected. Fairly good composition, but claims that it would gradually remove corns, bunions and callouses unwarranted.)

Armour and Company, Chicago, Ill.

(N) Savon de Toilette Luxor. (A good grade of soap delicately perfumed. Wrapped in silk and sold for one dollar. A good soap over-priced and over-praised.)

Cereal Soap Company, 8 Beach Street, New York.

(D) Zap. (Soap, sodium carbonate, cornmeal and oatmeal found. Statement that "no soap or soda is required" is misleading when both are present. Claim that it is "made from pure vegetable cereals" is not warranted since other substances are found. Unjustifiable criticism of other soaps and claims that it is "the greatest skin soap in the world," and is "absolutely pure" deemed unwarranted by its composition, either as determined or claimed.)

Colgate and Company, New York, N. Y.

- ★ Cashmere Bouquet Toilet Soap.
- * Heliotrope (Soap.)

Crittenton, Charles N., Company, New York, N. Y.

* Glenn's Sulphur Soap.

Fairbank, N. K., Company, Chicago, and New York.

★ Fairy Soap. (A good floating soap containing about 15 per cent. of water. All soaps that float contain somewhat more moisture. No free alkali or sodium carbonate. A good soap ex-

travagantly praised. "Unquestionably the purest, best and most satisfactory soap on the market," "the cleanest of all soaps for household use," unwarranted; others just as good.)

Hinds, A. S., Portland, Maine.

(D) Hind's Honey and Almond Cream Soap. (Name not warranted by composition; no honey or almond detected. Statement that it "improves the complexion" cannot be guaranteed.)

Hudnut, Richard, New York, N. Y.

★ Violet Sec. (Soap.)

Jergens, Andrew, Company, Cincinnati and New York.

- ★ Jergen's Violet Glycerine Soap. (Claims "We have caught the real fragrance of the violets"; perfume appears to be largely artificial.)
- (D) Woodbury's Facial Soap. (A good grade of soap containing a small amount of phenol or some similar antiseptic. The claim that it is recommended "for eczema and acne," and has "stimulating tonic properties" are not warranted, by composition.)

Johnson, B. J., Soap Company, Milwaukee, Wis.

(N) Palm Olive Soap. (Impossible to determine the exact nature of oils and fats used but palm and olive were not present in sufficient amounts to warrant the name. No criticism of soap itself.)

Johnson and Johnson, New Brunswick, N. J.

★ Synol Soap. (A liquid soap containing phenol and glycerin. No free alkali; 51 per cent. of moisture. Really a strong solution of carbolic; the surgical claims for antisepsis and germ destroying powers are slightly extravagant.)

Kirk, James S., and Company, Chicago, Ill.

★ Jap Rose Soap. (Statement that you "use only half as much as you would of any other soap" unwarranted. Contained 12 per cent water.)

Klein's, Budapest, Hungary.

* Glycerin Soap.

Lever Brothers Company, Boston, Mass.

(D) Lifebuoy Health Soap. (18 per cent. of water, no free alkali and a slight trace of sodium carbonate; contains cresols or similar coal tar products. A good soap but claims "brings beauty to the skin," "prevents infection," "for saving life and preserving health" not warranted.)

Lilly, Eli, and Company, Indianapolis, Ind.

★ Lilly's Liquid Soap—unscented.

Morgan's, Enoch, Sons Co., New York, N. Y.

(N) Hand Sapolio. (71 per cent. sand and little excess alkalinity. Claims to equal a mild turkish bath; not of "perfect purity." Has a place for removing stains, etc., but some claims excessive.)

Mülhens and Kropff, 298 Broadway, New York City.

★ White Rose Glycerin Soap.

Packer Manufacturing Company, New York.

* Packer's Tar Soap.

Pears, A. F., Ltd., 71-75 New Oxford Street, London, W. C.

* Pears' Soap.

Potter Drug and Chemical Company, Boston, Mass.

(D) Cuticura Soap. (A good grade of soap containing a small quantity of prussian blue and probably a little phenol. Prussian blue has been recommended for skin diseases. Excessive claims made for Cuticura as to the prevention and treatment of skin eruptions, are not warranted by its composition.)

Proctor and Gamble, Cincinnati, Ohio.

. * Ivory Soap.

Remmers, Cincinnati, Ohio.

(D) Remmers' Peroxide Soap. (No peroxide could be determined by the usual tests, therefore the name is unwarranted and the product misbranded.)

Resinol Soap Company, Baltimore, Md.

(D) Resinol Soap. (Contains a small amount of cresol or some similar substance. Impossible claims made to the effect that it "prevents acne," "nourishes the underlying tissues of the

skin," "prevents falling out of the hair," etc., whereas antiseptic properties are very limited.)

Roger and Gallet, Rue d'Hauteville, Paris.

- * Savon Violette de Parme.
- ★ Savon Vera-Violetta. (A good grade of soap, scented with violet. Sold for 85 cents. No superiority to the 25 cent cake could be discovered. Perfume may be superior but finished product does not show it. Price excessive.)

Roessler and Hasslacher Chemical Company, New York, N. Y.

(D) Peroxide Zinc Soap. (A good peroxide zinc soap really liberating some oxygen. Claims made, however, as to the "antisepsis of the body," "feeding oxygen through the pores of the skin," etc., are absolutely unscientific and unwarranted, as the skin does not absorb oxygen to any notable extent under any conditions, so far as scientists have been able to determine.)

Wrisley, Allen B., Company, Chicago, Ill.

(D) Olivilo Soap. (A good soap but claims untenable: "Makes beauty," "lasts nearly twice as long as other ten cent toilet soaps," "keeps the skin in its natural healthy condition."

TOOTH POWDERS, PASTES, ETC.

There are few if any tooth powders which are really injurious, but their antiseptic power is limited by the conditions under which they are used and the excessive claims made for these simple preparations as to their efficacy in destroying germs, sterilizing the mouth, preventing the formation of tartar, and even preventing or curing pyorrhea, are out of all proportion to the facts. A good calcium carbonate, alkaline, mouth wash is of value for its antacid properties, and the antiseptics, such as menthol, benzoic acid, thymol, eucalyptol, etc., which are added have a limited efficiency. Plain hydrogen dioxide, however, is probably as efficient an artificial mouth wash as is available. The great claims made for the liberation of oxygen in the mouth and the effect so produced must be looked at askance; even though the statements may be true to a certain extent theoretically, the effect produced in the mouth is problematic. The claims that the breath is purified are obviously false. The breath may be perfumed or sweetened, but bad breath coming from decaying teeth or lung trouble or indigestion is not purified by the use of any tooth paste, powder or wash, whatever it may

contain. Some of the preparations are accompanied by circulars giving laboratory reports and imposing pictures of microscopic slides, "before and after using," showing the germicidal effect of the products in question. A laboratory experiment of this kind by no means parallels the conditions existing in the mouth and the conclusions drawn from such experiments are unwarranted. The ingredients of the several tooth powders and pastes indicated in the list do not pretend to be complete analyses, as often the ingredients are present in too small an amount to be distinguished by analysis. Only the general character of the product is indicated.

The real function of a tooth paste or tooth powder is to assist the brush and water in thoroughly cleansing the tooth by friction. The antisepsis afforded is really secondary and there is room for a wide reform in regard to tooth pastes and tooth powders, as to the claims made in this respect, a point brought out at the recent meeting of the National Dentists' Association, by Dr. L. F. Kebler, Chief of the Division of Drugs, Department of Agriculture, who said:

[&]quot;After learning of the beneficial inhibiting effects of the antiseptics on the activities of bacteria, it was nat-

urally believed that there was the means by which the bacterial flora of the buccal cavity could be controlled or stayed, if not absolutely destroyed. Experiments, however, soon showed that it was impossible to sterilize the oral cavity or even to appreciably diminish the number of bacteria without using the drugs in such strength as to make them intolerable, if not absolutely dangerous, either because of their disagreeable odor, and taste, or because of their effects upon the mucous membrane and their toxicity. . . . It is a well recognized principle in bacteriology that the greater the dilution of a germicide, the longer the time of action necessary to destroy the bacteria, and vice versa. From the necessary dilution already considered, it is quite evident that none of these germicidal agents can avail much in sterilizing the mouth, and that antiseptics are of correspondingly little actual value."

It is these extravagant and misleading claims which made it impossible to give the highest approval to many of the good tooth powders listed. When a very excellent tooth powder containing more antiseptics than usual is said to "kill all germs," "prevent contagion and all disease," and "cleanse as nothing else will do," we are obliged to disprove it, excellent as its composition may be, as we could not put our guarantee back of such misleading claims.

TESTED TOOTH POWDERS, PASTES, ETC.

(Starred products (*) are rated at 85 to 100; (N) indicates a noncommittal rating between 76 and 84; disapproved products (D), rated at 75 and less; see Introduction and page xxviii for details as to method of rating.)

Allen Pharmacal Company, New York.

(N) Royal Tooth Powder. (Consists essentially of soap, calcium carbonate, and methyl salicylate.

Claims as to preserving and hardening the gums mildly extravagant.)

American Druggists' Syndicate, Long Island City, N. Y.

- (N) A. D. S. Peroxide Tooth Powder. (Chalk, soap, some form of solid peroxide, and flavoring agents. Claims to "heal and harden the gums," "remove all external discolorations," to be "a scientific combination of cleansing and antiseptic agents," "to leave the mouth in an antiseptic condition." Claims unwarranted.)
- (D) A. D. S. Peredixo Tooth Paste. A Peroxide Tooth Paste. (Use of word "Peredixo" to suggest peroxide. No peroxide whatever found; merely soap, chalk, glycerin, and flavoring agents. Claims to be a peroxide tooth paste, which will leave the mouth in a thoroughly aseptic and wholesome condition. Name and claims misleading.)

Armour and Company, Chicago, Ill.

(N) Luxor Tooth Paste. (Calcium carbonate and soap with menthol. A good antacid tooth

paste, but the claims that it "sweetens the breath," "hardens the gums," and is "antiseptic" are somewhat overdrawn.)

Colgate and Company, New York, N. Y.

★ Ribbon Dental Cream. (Menthol, soap, calcium carbonate, benzoic acid, wintergreen, probably glycerin. Claims merely to be antiseptic, which it is to a slight degree.)

Dentacura Company, Newark, N. J.

(N) Dentacura. (A good preparation containing soap, calcium carbonate, methyl salicylate, menthol, eucalyptol, boric acid, etc. No thymol could be detected in the finished product though it is said to be added. Former impossible claims such as "kills all germs," "prevents contagion," etc., withdrawn.)

Hall and Ruckel, New York, N. Y.

- (N) Sozodont Tooth Paste. (Soap, calcium carbonate, eosin (coloring), oil of cinnamon, and menthol. A good tooth paste but the claims that it is the "embodiment of ideas of famous chemists," "hardens the gums," etc., are not warranted by its simple composition.)
- (N) Van Buskirk's Sozodont Antiseptic Tooth Paste.

 (Essentially soap, calcium carbonate, menthol, methyl salicylate and salicylic acid. Claims that it "hardens the gums," "tones and sterilizes the mouth," extravagant; other statements moderate.)

Kolynos Company, New Haven, Conn.

(D) Kolynos. (A good preparation containing calcium carbonate, soap, menthol and small amounts of other antiseptics. Overburdened with perfectly impossible claims such as "disease preventer," "destroys germs of diphtheria and pneumonia in less than one minute," etc., "sterilizes the mouth to degree heretofore believed impossible," etc.)

Lavoris Chemical Company, Minneapolis, Minn.

(D) Lavoris. (A mouth wash containing zinc chloride, menthol, oil of cassia and alcohol, as its principal ingredients. Formaldehyde claimed, none found; statements made as to its germicidal and healing properties greatly exaggerated.)

Lehn and Fink, New York, N. Y.

(D) Pebeco Tooth Paste. (Differs from most tooth pastes in containing potassium chlorate; probably is not injurious under the conditions in which it is used, and the amount in which it is present. Other important ingredients are: calcium carbonate, soap, methyl salicylate, and menthol. Extravagant claims as to efficiency in relief of disease, antiseptic value, etc., untenable.)

Lyon, I. W., and Sons, 520 West 27th Street, New York.

(N) Perfect Tooth Powder. (Essentially soap, calcium carbonate, and methyl salicylate. Does

not really "purify the breath" as claimed.)
McKesson and Robbins, New York, N. Y.

(N) Calox, The Oxygen Tooth Powder. (Contains peroxide, menthol, methyl salicylate and calcium carbonate. Does liberate some active oxygen in the mouth but the efficacy of this ingredient is greatly over estimated.)

Mennen, Gerhard, Chemical Company, Newark, N. J.

(N) Cream Dentrifrice. (Consists essentially of soap, calcium carbonate, glycerin, alcohol and aromatic, antiseptic oils, among which menthol is prominent. Former extravagant claims that it "sterilizes the breath," "is highly germicidal, hence a protection against all germ diseases and decay," have been withdrawn but label is still slightly extreme.

Pyro Chemical Company, 1212 Saratoga Street, Baltimore, Md.

(D) Pyrodento. (An alkaline liquid, containing 5 per cent. of alcohol, as declared, with sodium bicarbonate, egg albumen, boric acid, glycerin, and small amount of formaldehyde, and the oils of cinnamon, spearmint and peppermint. No potassium permanganate could be detected, though it is claimed in the formula, and if added, is present in too small amounts to be detected or to be of any practical value. Claims that "It destroys bacteria, thus acting as a prophylactic to all diseases of the oral cavity," "hardens

the gums," and is "especially recommended for pyorrhea," not warranted.)

(D) Pyrodento Crême Paste. (Consists essentially of calcium and magnesium carbonates, fixed oil, boric acid, glycerin, egg albumen, a trace of formaldehyde, sodium carbonate, oils of spearmint, peppermint, and cinnamon. No soap, gelatin or starch present. No potassium permanganate detected. Could not sterilize "at the mouth," and its usefulness in the treatment of pyorrhea, stomatitis, chronic ulcerations, etc., problematic.)

Sanitol Chemical Laboratory Company, St. Louis, Mo.

(N) Sanitol Tooth Paste. (Contains calcium carbonate, soap, methyl salicylate, and menthol. Claims "the most effective cream known to the dentist," "of lasting benefit to teeth and gums," not warranted by the composition.)

Sheffield Dentrifice Company, New York City, N. Y.

(N) Dental Cream. (Essentially sassafras, menthol, soap, calcium carbonate, eosin (coloring) and oil of cinnamon. Over weighted with such claims as the following: "Coats the teeth with an alkaline film that protects them for hours"; "neutralizes all acids of the mouth," "best in the world," etc.)

United Drug Company, Boston, Mass.

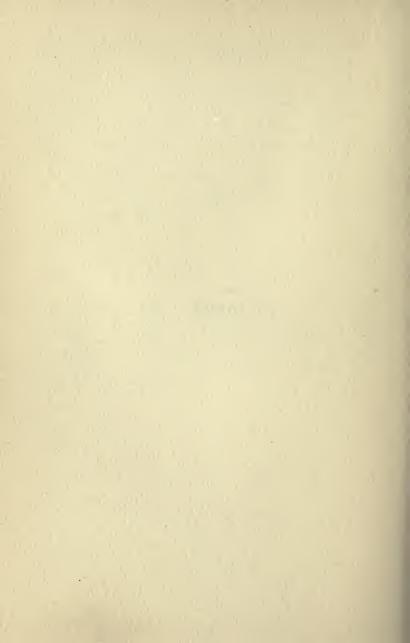
(N) Rexall Tooth Powder. (Essentially soap, cal-

cium carbonate, methyl salicylate and thymol. Claims to remove usual cause of decayed teeth and fetid breath. This could not possibly be true, as decaying teeth and bad breath in many cases have deep systemic causes which a tooth powder could not reach. Statement true only in a most general way in so far as it keeps the teeth clean.)

Note: Changes and corrections in ratings and descriptive matter will be published, as opportunity may offer, in Good Housekeeping Magazine. All communications concerning such changes should be addressed to me as Director of the Good Housekeeping Bureau of Foods, Sanitation and Health, Woodward Building, Washington, D. C.

H. W. WILEY.





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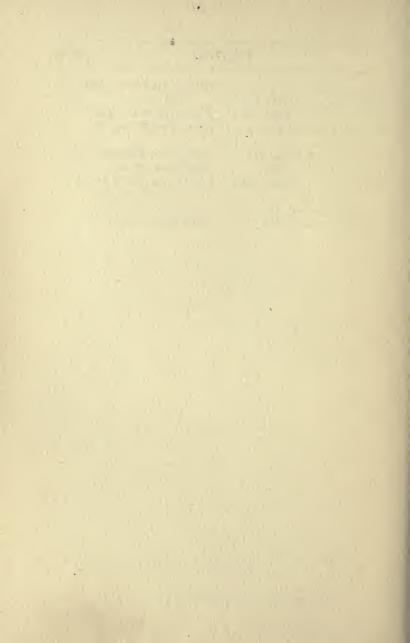
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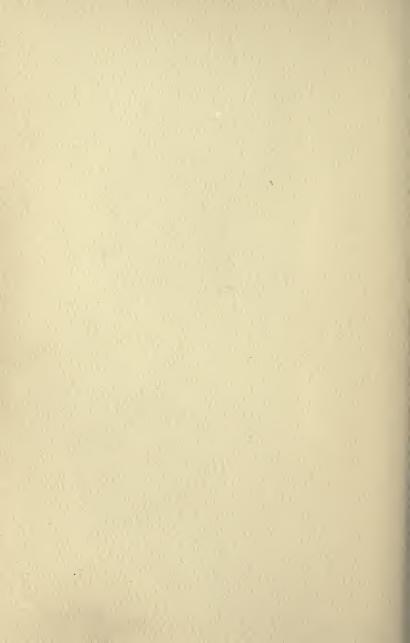
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